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L9
     ANSWER 1 OF 49, CAPLUS COPTRIGHT 2002 ACS
ΑN
     2002:31419 CAPLUS
DN
     136:85830
     Preparation of bicyclic lactams and sulfonamides as 5-HT1A agonists
ΤI
     Steiner, Gerd; Schellhaas, Kurt; Szabo, Laszlo; Behl, Berthold;
IN
     Garcia-Ladona, Francisco Javier; Unger, Liliane
     Knoll Gmbh, Germany
PA
SO
     PCT Int. Appl., 39 pp.
     CODEN: PIXXD2
DT
     Patent
     German
LΑ
FAN.CNT 1
                      KIND
                                           APPLICATION NO.
     PATENT NO.
                            DATE
                                           WO 2001-EP7571
                                                             20010702
     WO 2002002529
                      A1
                            20020110
ΡI
         W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN,
             CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH,
             GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR,
             LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT,
             RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US,
             UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM
         RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY,
             DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF,
             BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG
                            20000703
PRAI DE 2000-10031391 A
GI
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$$R^1$$
 (CH2) $n - X$ $Y - ZR2$

Title compds. [I; the ring including NA can be a 5-7 membered ring contg. O, S, or double bond; A = CO, SO2; X = N; Y = CH2, CH2CH2, (CH2)3, CH2CH; Z = N, C, CH; n = 2-4; R1 = H, halo, alkyl, CF3, OH, alkoxy, amino; R2 = (substituted) (anellated) Ph, pyridyl, pyrazinyl] and salts thereof, were prepd. Thus, isoquinoline in DMF was stirred with NaH for 30 min. followed by addn. of 1-[4-(2-chloroethyl)-1-piperazinyl]isoquinoline (prepn. given) and stirring for 2 h at 80.degree. to give 82% 2-[2-(4-(1-isoquinolinyl)-1-piperazinyl)ethyl]-1(2H)-isoquinoline.2HCl.2H2O. Tested I showed affinity for the 5-HT1A receptor with Ki = 0.1-5.4 nM in HEK 293 cells.

IT **387399-39-5**

RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(prepn. of bicyclic lactams and sulfonamides as 5-HT1A agonists)

RN 387399-39-5 CAPLUS

CN INDEX NAME NOT YET ASSIGNED

●2 HC1

RE.CNT 16 THERE ARE 16 CITED REFERENCES AVAILABLE FOR THIS RECORD ALL CITATIONS AVAILABLE IN THE RE FORMAT

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L9 ANSWER 22 OF 49 CAPLUS COPYRIGHT 2002 ACS
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AN 1992:433673 CAPLUS

DN 117:33673

TI Thiophene sulfonamides useful as carbonic anhydrase inhibitors for the treatment of glaucoma

IN Dean, Thomas R.; Chen, Hwang Hsing; May, Jesse A.

PA Alcon Laboratories, Inc., USA

SO PCT Int. Appl., 82 pp. CODEN: PIXXD2

DT Patent

LA English

FAN.CNT 4

2.2	PA'	TENT	NO.		KIN	1D	DATE			AP	PLI	CATI	ои ис	o. 	DATE	
PI	WO						1991 JP,			WC	19	91-U:	s2262	2	199104	103
				-	-	-	DK,	-		GB.	GR.	TT.	T.U.	NT.	SE	
	US		•	•	•	•	•	•		-	•	•	•	•	199011	L27
															199104	
															199104	
	ΑU	6559	24		В2	2	1995	0119								
	EP	5278	01		A1	L	1993	0224		EP	19	91-90	0831	7	199104	103
		R:	ΑT,	BE,	CH,	DE,	DK,	ES,	FR,	GB,	GR,	IT,	LI,	LU,	NL, S	SE
	BR	9106	330		Α		1993	0420		BR	19	91-63	330		199104	103
	JP	0550	8832		T2	2	1993	1209		JP	19	91-50	0800:	1	199104	103
		2562														
	ZA	9102	580		Α		1992	0129		ZA	. 19	91-29	580		199104	108
															199104	
															199210	
										FI	19	96-34	124		199609	902
PRAI		1990														
		1990														
		1991														
		1992					1992	1008								
	MAI	RPAT	117:3	33673	3											
GI																

The title compds. [I; R1 = H, (un) substituted C1-4 alkyl; R2 = H, (un) substituted C1-8 alkyl, (un) substituted C3-7 alkynyl, Ph, heteroaryl, etc; R3 = H, halo, C1-4 alkyl, C1-8 alkoxy, C1-8 alkylthiol, etc; G = C0, S02] and a pharmaceutically acceptable salt thereof are effective in lowering and controlling intraocular pressure. An ophthalmic suspension contained 3,4-dihydro-4-methoxy-2-methyl-2H-thieno[3,2-e]-1,2-thiazine-6-sulfonamide-1,1-dioxide (prepn. given) 3.0, hydroxypropyl Me cellulose 0.5, Na2HPO4 0.2, di-Na edetate 0.01, NaCl 0.8, benzalkonium chloride 0.01, polysorbate-80 0.1, NaOH/HCl q.s. to pH 7.02, and water to 100.00 %.

IT 138890-43-4 138890-54-7

RL: BIOL (Biological study)

(ophthalmic prepns. contg., for lowering intraocular pressure)

RN 138890-43-4 CAPLUS

CN 2H-Thieno[3,2-e]-1,2-thiazine-6-sulfonamide, 3,4-dihydro-4-methoxy-2-[2-

(4-morpholinyl)ethyl]-, 1,1-dioxide (9CI) (CA INDEX NAME)

RN 138890-54-7 CAPLUS

CN 2H-Thieno[3,2-e]-1,2-thiazine-6-sulfonamide, 3,4-dihydro-4-hydroxy-2-[2-(4-morpholinyl)ethyl]-, 1,1-dioxide (9CI) (CA INDEX NAME)

IT 138891-00-6P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation) (prepn. and reaction of, in prepn. of thiophene sulfonamide for glaucoma treatment)

RN 138891-00-6 CAPLUS

CN 2H-Thieno[3,2-e]-1,2-thiazin-4-ol, 3,4-dihydro-2-[2-(4-morpholinyl)ethyl]-, 1,1-dioxide (9CI) (CA INDEX NAME)

IT 138890-72-9P

RL: PREP (Preparation)

(prepn. of, as intraocular pressure lowering agent)

RN 138890-72-9 CAPLUS

CN 2H-Thieno[3,2-e]-1,2-thiazine-6-sulfonamide, 3,4-dihydro-4-hydroxy-2-[2-(4-morpholinyl)ethyl]-, 1,1-dioxide, monohydrochloride (9CI) (CA INDEX NAME)

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L9 ANSWER 39 OF 49 CAPLUS COPYRIGHT 2002 ACS

AN 1974:69 CAPLUS

DN 80:69

TI New benzothiazines. 4. 1H-2,3-Benzothiazin-4(3H)-one 2,2-dioxide and 2H-1,2-benzothiazin-3(4H)-one 1,1-dioxide nitrogen derivatives with central nervous system activity

AU Sianesi, Enrico; Redaelli, Riccardo; Magistretti, Maria J.; Massarani, Elena

CS Res. Div., Recordati S.a.S., Milan, Italy

SO J. Med. Chem. (1973), 16(10), 1133-7 CODEN: JMCMAR

DT Journal

LA English

AB Addnl. data considered in abstracting and indexing are available from a source cited in the original document. Among the 2 series of title compds., the most active hypnotics and anticonvulsants were 3-allyl-1H-2,3-benzothiazin-4(3H)-one 2,2-dioxide (I) [31846-48-7] and 2-allyl-2H-1,2-benzothiazin-3(4H)-one 1,1-dioxide (II) [31848-18-7]. I had a hypnotic ED50 of 250 mg/kg, i.p. and an anticonvulsant ED70 of 100 mg/kg, i.p. in mice; corresponding values for II were 150 and 160 mg/kg. I and II were prepd. by direct alkylation of the resp. benzothiazinone dioxides with allyl bromide.

IT 31848-26-7P

RL: SPN (Synthetic preparation); PREP (Preparation)
 (prepn. of)

RN 31848-26-7 CAPLUS

CN 2H-1,2-Benzothiazin-3(4H)-one, 2-[2-(4-morpholinyl)ethyl]-, 1,1-dioxide, monohydrochloride (9CI) (CA INDEX NAME)

● HCl

L9 ANSWER 27 OF 49 CAPLUS COPYRIGHT 2002 ACS

AN 1989:478013 CAPLUS

DN 111:78013

TI Preparation of 2-substituted derivatives of 2H-3-acyl-4-hydroxy-5,7-dimethylpyrido[3,2-e][1,2]thiazine 1,1-dioxides as analgesics

IN Malinka, Wieslaw; Zawisza, Tadeusz; Wilimowski, Marian

PA Akademia Medyczna Wroclaw, Pol.

SO Pol., 3 pp. CODEN: POXXA7

DT Patent

LA Polish

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
ΡI	PL 143077	B2	19880130	PL 1986-257400	19860107
os	CASREACT 111:780	13; MA	RPAT 111:78013		

GI

$$Me \longrightarrow N \longrightarrow S_2 \longrightarrow NR^1$$

AB Title compds. I (R = Me, Ph; R1 = alkyl, alkylaryl, alkylcarboxy, alkyl ester, alkylamido, alkenyl, alkoxycarbonyl), useful as analgesics (no data), were prepd. 2H-3-Acetyl-4-hydroxy-5,7-dimethylpyrido[3,2-e][1,2]thiazine 1,1-dioxide and MeI are added to NaOMe at room temp. followed by acidification with HOAc to give I (R = R1 = Me) in 60% yield.

IT 121879-81-0P

RL: BAC (Biological activity or effector, except adverse); SPN (Synthetic

preparation); THU (Therapeutic use); BIOL (Biological study); PREP
(Preparation); USES (Uses)

(prepn. of, as analgesic)

RN 121879-81-0 CAPLUS

CN Methanone, [4-hydroxy-5,7-dimethyl-2-[3-(4-methyl-1-piperazinyl)propyl]-1,1-dioxido-2H-pyrido[3,2-e]-1,2-thiazin-3-yl]phenyl- (9CI) (CA INDEX NAME)

$$\begin{array}{c|c}
N & (CH_2)_3 & N & Me \\
\hline
N & O & N & Me \\
\hline
N & O & N & Me
\end{array}$$

L9 ANSWER 28 OF 49 CAPLUS COPYRIGHT 2002 ACS

AN 1987:458954 CAPLUS

DN 107:58954

TI Synthesis and properties of 2H-4-hydroxy-2,5,7-trimethylpyrido[3,2-e]-

1,2-

thiazine-1,1-dioxide-3-carboxamides

AU Zawisza, T.; Malinka, W.

CS Dep. Chem. Drugs, Sch. Med., Wroclaw, Pol.

SO Farmaco, Ed. Sci. (1986), 41(11), 892-8

CODEN: FRPSAX; ISSN: 0430-0920

DT Journal

LA English

OS CASREACT 107:58954

GI

AB Rearrangement of pyridoisothiazolinoneacetate I with EtO- gave pyridothiazinecarboxylate II (R = OEt). Reaction of II (R = OEt) with amines gave amides II (R = NH-2-pyridyl, NHPh, NH-2-thiazolyl, etc.) (III). III show antiinflammatory and immunosuppressive activity.

IT 109418-08-8P

RL: SPN (Synthetic preparation); PREP (Preparation) (prepn. and antiinflammatory and immunosuppressant activity of)

RN 109418-08-8 CAPLUS

CN Piperazine, 1-[(4-hydroxy-2,5,7-trimethyl-1,1-dioxido-2H-pyrido[3,2-e]-

1,2-

thiazin-3-yl)carbonyl]-4-methyl- (9CI) (CA INDEX NAME)

L9 ANSWER 29 OF 49 CAPLUS COPYRIGHT 2002 ACS

AN 1987:407141 CAPLUS

DN 107:7141

TI A novel system: 2H-pyrido[3,2-e]-1,2-thiazine-1,1-dioxide. Synthesis And properties of some derivatives

AU Zawisza, T.; Malinka, W.

CS Dep. Chem. Drug, Sch. Med., Wroclaw, Pol.

SO Farmaco, Ed. Sci. (1986), 41(10), 819-26 CODEN: FRPSAX; ISSN: 0430-0920

DT Journal

LA English

GI

AB Reactions of pyridoisothiazoline dioxides I (R = COMe, COPh) with NaOEt produced rearrangement to give pyridothiazine dioxides II (R1 = H).

N-Alkylation of II (R = COMe, COPh; R1 = H) gave II (R1 = Me, allyl, CH2Ph,CH2CO2Et,CH2COPh, CO2Me, etc.). Some II showed strong analgesic activity.

IT 108586-73-8P 108586-78-3P

RL: BAC (Biological activity or effector, except adverse); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation) (prepn. and analgesic activity of)

RN 108586-73-8 CAPLUS

CN Ethanone, 1-[4-hydroxy-5,7-dimethyl-2-[3-(4-methyl-1-piperazinyl)propyl]-1,1-dioxido-2H-pyrido[3,2-e]-1,2-thiazin-3-yl]-, dihydrochloride (9CI)(CA INDEX NAME)

●2 HC1

RN 108586-78-3 CAPLUS

CN Methanone, [4-hydroxy-5,7-dimethyl-2-[3-(4-methyl-1-piperazinyl)propyl]-1,1-dioxido-2H-pyrido[3,2-e]-1,2-thiazin-3-yl]phenyl-, dihydrochloride (9CI) (CA INDEX NAME)

Me
$$N$$
 $CH_2)_3$ N Me N Me N Me

L9 ANSWER 30 OF 49 CAPLUS COPYRIGHT 2002 ACS

AN 1986:515006 CAPLUS

DN 105:115006

1,2-Benzothiazines. Part 2. A new approach to 3-carboxamides of the 4-hydroxy-2-methyl-2H-1,2-benzothiazine 1,1-dioxide system

AU Dalla Croce, Piero; La Rosa, Concetta

CS Dip. Chim. Org. Ind., Univ. Milano, Milan, 20133, Italy

SO J. Chem. Res., Synop. (1986), (4), 150-1 CODEN: JRPSDC; ISSN: 0308-2342

DT Journal

LA English

OS CASREACT 105:115006

GI

AB Reaction of carboxylic acid I (R = CH2Ph, R1 = OH), prepd. from I (R = H, R1 = OMe) by sequential benzylation and hydrolysis, with SOC12 or C1CO2Et-Et3N followed by amines gave the amides I (R = CH2Ph, R1 = NHPh, NHCH2Ph, piperidino, 5-methylisoxazol-3-ylamino, 2-pyridinylamino, thiazol-2-ylamino) (II) in 55-90% yield. Hydrolysis of II with 15% aq. H2SO4 or HCl in 1,4-dioxane at 100.degree. for 2-12 h gave 80-95% hydroxy amides I (R = H, R1 as before).

IT 104142-06-5P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation) (prepn. and hydrolysis of)

RN 104142-06-5 CAPLUS

CN Piperidine, 1-[[2-methyl-1,1-dioxido-4-(phenylmethoxy)-2H-1,2-benzothiazin-3-yl]carbonyl]- (9CI) (CA INDEX NAME)

IT 104142-10-1P

RN 104142-10-1 CAPLUS

CN Piperidine, 1-[(4-hydroxy-2-methyl-1,1-dioxido-2H-1,2-benzothiazin-3-yl)carbonyl]- (9CI) (CA INDEX NAME)

L9 ANSWER 31 OF 49 CAPLUS COPYRIGHT 2002 ACS

AN 1985:541990 CAPLUS

DN 103:141990

TI 1,2-Benzothiazine-3-carboxamide dioxides

IN Puigdellivol, Pedro; Goday, Elisa

PA Laboratorio Fides S. A., Spain

SO Span., 7 pp.

CODEN: SPXXAD

DT Patent

LA Spanish

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE	
PI GI	ES 523598	A1	19841101	ES 1983-523598	19830627	

AB N,N-Succiny1-2-methy1-4-hydroxy-2H-1,2-benzothiazine-3-carboxamide (I) was

treated with RNH2 (R = 2-pyridyl, 5-methyl-3-isoxazolyl, 2-thiazolyl) to yield amides II, useful as antiinflammatory agents (no data). I was stirred with 2-aminopyridine in dioxane to give II (R = 2-pyridyl).

IT 98207-09-1

RL: RCT (Reactant)

(transamidation of, by aminopyridine)

RN 98207-09-1 CAPLUS

CN 2,5-Pyrrolidinedione, 1-[(4-hydroxy-2-methyl-1,1-dioxido-2H-1,2-benzothiazin-3-yl)carbonyl]- (9CI) (CA INDEX NAME)

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ANSWER 32 OF 49 CAPLUS COPYRIGHT 2002 ACS
L9
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1983:470744 CAPLUS AN

DN 99:70744

Derivatives of 1H-1-alkyl(alkenyl or aminoalkyl)-5,7-dimethyl-4-hydroxy-ΤI

3-

phenylpyrido[2,3-c]-1,2-thiazine 2,2-dioxide, substituted at the 4oxygen

atom

Zawisza, Tadeusz; Milian, Anna; Jakobiec, Tadeusz; Gieldanowski, Jerzy IN

Akademia Medyczna Wroclaw, Pol. PΑ

Pol., 4 pp. SO

CODEN: POXXA7

DTPatent

LΑ Polish

FAN.CNT 1

KIND DATE APPLICATION NO. DATE PATENT NO. -----______ ____ _____ 19780803 PΙ PL 115288 B2 19810331 PL 1978-215422

os CASREACT 99:70744

GI

in

Title compds. I [R, R1 = Me, Et, allyl, Me2NCH2CH2, Me2N(CH)3, AB 3-(N'-methylpiperazino)propyl; or R1 = EtO2CCH2] were prepd. by condensing

Me (II) or Et 2-amino-4,6-dimethylnicotinate with PhCH2SO2Cl (III), cyclizing the resulting sulfonamido ester (IV) in an org. solvent contg. NaH at >60.degree., and alkylating the intermediate dihydropyrido[2,3-

c]-1,2-thiazin-4-one (V) with the corresponding RX (X = halo) and R1X in an org. solvent contg. an alcoholate. Thus, II 36 and III 35 g were dissolved in 400 mL anhyd. C6H6, treated with 21 g Et3N in 50 mL C6H6, stirred 7 h at 50.degree., Et3NH+ Cl- filtered, C6H6 evapd., and the residue crystd. from MeOH to give 35 g IV (R2 = Me). The latter 9.3 g

40 mL dry DMF was added to 4.8 g .apprx.50% NaH suspension in 20 mL dry DMF, the mixt. heated 3 h at 60-70.degree., cooled and poured into 1 L H2O, the mixt. filtered, the filtrate acidified with HCl, and the product

crystd. from EtOH to give 7.2 g V. V 3 was added to Na 0.23 g in 50 mL dry EtOH, dissoln. heated 0.5 h, part of the solvent distd., .apprx.0.01 mol Me2NCH2CH2Cl in 50 mL dry C6H6 added, the mixt. heated 10 h, the NaCl

formed filtered, the filtrate evapd., the residue dissolved in 40 mL hot 10% HCl, and the salt crystd. from EtOH to give 2.8 g aminoethylated intermediate VI. VI 5.8 g was dissolved in 180 mL dry EtOH contg. 0.7 g Na, 2.2 g MeI in 30 mL EtOH added over 0.5 h, the mixt. heated 3 h, the solvent distd., the residue shaken with 50 mL H2O and crystd. from MeOH

to

give 3.6 g I (R = Me2NCH2CH2, R1 = Me).

IT 76967-72-1P

RN 76967-72-1 CAPLUS

CN 1H-Pyrido[2,3-c][1,2]thiazine, 4-methoxy-5,7-dimethyl-1-[3-(4-methyl-1-piperazinyl)propyl]-3-phenyl-, 2,2-dioxide (9CI) (CA INDEX NAME)

L9 ANSWER 33 OF 49 CAPLUS COPYRIGHT 2002 ACS

AN 1981:167649 CAPLUS

DN 94:167649

TI Pharmacological activity in the group of new pyrido[2,3-c]-1,2-thiazine 1,1-dioxide derivatives

AU Kowalczyk-Bronisz, Stefania H.

CS Inst. Immunol. Exp. Ther., Pol. Acad. Sci., Wroclaw, 53-114, Pol.

SO Arch. Immunol. Ther. Exp. (1980), 28(5), 783-90 CODEN: AITEAT; ISSN: 0004-069X

DT Journal

LA English

AB The effects of 25 title compds. ranged from strongly immunosuppressive

to

immunostimulating, and from strongly anti-inflammatory to pro-inflammatory. The structural basis for these diverse effects was obscure.

IT 77201-29-7

RL: BIOL (Biological study)

(immunity and inflammation response to)

RN 77201-29-7 CAPLUS

CN 1H-Pyrido[2,3-c][1,2]thiazine, 5,7-dimethyl-1-[3-(4-methyl-1-piperazinyl)propyl]-3-phenyl-, 2,2-dioxide (9CI) (CA INDEX NAME)

L9 ANSWER 34 OF 49 CAPLUS COPYRIGHT 2002 ACS

AN 1981:156843 CAPLUS

DN 94:156843

TI Pyridothiazines. Part VI. Syntheses and properties of pyrido[2,3-c]-1,2-thiazine 1,1-dioxide derivatives

AU Zawisza, Tadeusz; Milian, Anna; Jakobiec, Tadeusz

CS Inst. Drugs, Sch. Med., Wroclaw, 50137, Pol.

SO Pol. J. Chem. (1980), 54(7-8), 1413-24 CODEN: PJCHDQ

DT Journal

LA English

GI

AB Pyridothiazine dioxides I and II (R = Me, Et, allyl, CH2CO2Et, CH2CO2H, CH2CH2NMe2, (CH2)3NMe2, 4-methylpiperazinopropyl) were prepd. from the ketone III by redn., alkylation, and dehydration or by alkylation, redn.,

and dehydration.

IT 77201-29-7P

RL: SPN (Synthetic preparation); PREP (Preparation) (prepn. of)

RN 77201-29-7 CAPLUS

CN 1H-Pyrido[2,3-c][1,2]thiazine, 5,7-dimethyl-1-[3-(4-methyl-1-piperazinyl)propyl]-3-phenyl-, 2,2-dioxide (9CI) (CA INDEX NAME)

L9 ANSWER 35 OF 49 CAPLUS COPYRIGHT 2002 ACS

AN 1981:139716 CAPLUS

DN 94:139716

TI Pyridothiazines. Part V. Syntheses and properties of 7-alkoxy derivatives of pyrido[2,3-c]-1,2-thiazine 1,1-dioxide

AU Zawisza, Tadeusz; Milian, Anna; Jakobiec, Tadeusz

CS Sch. Med., Inst. Drug, Wroclaw, 50137, Pol.

SO Pol. J. Chem. (1980), 54(6), 1267-73 CODEN: PJCHDQ

DT Journal

LA English

GI

AB Pyridothiazine dioxides I (R = Me, Et, allyl, CH2CH2NMe2, (CH2)3NMe2, 4-methylpiperazinopropyl; R1 = Me, Et, allyl, CH2CH2NMe2, CH2CO2Et) were prepd. by alkylating II. I (R = CH2CH2NMe2, (CH2)3NMe2, 4-methylpiperazinopropyl, R1 = Me) were converted to their quaternary methiodides. The corresponding quaternary II were also prepd. I (R = CH2CH2NMe2, R1 = Me) had the strongest antiinflammatory and immunosuppressant activity.

IT 76967-72-1P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation) (prepn. and quaternization of)

RN 76967-72-1 CAPLUS

CN 1H-Pyrido[2,3-c][1,2]thiazine, 4-methoxy-5,7-dimethyl-1-[3-(4-methyl-1-piperazinyl)propyl]-3-phenyl-, 2,2-dioxide (9CI) (CA INDEX NAME)

IT 76967-76-5P

RL: SPN (Synthetic preparation); PREP (Preparation)
 (prepn. of)

RN 76967-76-5 CAPLUS

CN Piperazinium, 1-[3-(4-methoxy-5,7-dimethyl-2,2-dioxido-3-phenyl-1H-

pyrido[2,3-c][1,2]thiazin-1-yl)propyl]-1,4,4-trimethyl-, diiodide (9CI)
(CA INDEX NAME)

2 I-

L9 ANSWER 36 OF 49 CAPLUS COPYRIGHT 2002 ACS

AN 1981:103268 CAPLUS

DN 94:103268

TI Derivatives of 6,7-dimethoxy-1-thiaisochroman-1,1-dioxide and 3,4-dihydro-6,7-dimethoxy-2H-1,2-benzothiazine-1,1-dioxide

AU Poepel, W.; Laban, G.; Faust, G.; Dietz, G.

CS Direktionsber. Forsch. Entwickl., VEB Pharm. Kombinat GERMED, Dresden, Ger. Dem. Rep.

SO Pharmazie (1980), 35(5-6), 266-78 CODEN: PHARAT; ISSN: 0031-7144

DT Journal

LA German

GI

AB The title compds. (I; X = O, NH, NMe, NCH2Ph; R = H, Me; R1 = substituted

NH2, OMe, OPr, OCH2Ph, etc.) were prepd. e.g. by cyclizing $3,4-(MeO)\,2C6H3CH2CRXCN$ (X = Cl, OH) with conc. H2SO4 and then derivatizing

the resulting acid. I (X = O, R1 = ester group) showed anticonvulsant and $\,$

central nervous system (CNS) depressant activity (no data), whereas I (X

substituted NH) had weaker CNS activity with antitussive activity.

TT 76667-17-9P 76667-18-0P 76667-19-1P 76667-22-6P 76667-40-8P 76667-41-9P 76667-50-0P 76667-73-7P

RL: SPN (Synthetic preparation); PREP (Preparation)

(prepn. of)

RN 76667-17-9 CAPLUS

CN Pyrrolidine, 1-[(3,4-dihydro-6,7-dimethoxy-1,1-dioxido-2H-1,2-benzothiazin-

3-yl)carbonyl]- (9CI) (CA INDEX NAME)

RN 76667-18-0 CAPLUS

CN Piperidine, 1-[(3,4-dihydro-6,7-dimethoxy-1,1-dioxido-2H-1,2-benzothiazin-

3-yl)carbonyl]- (9CI) (CA INDEX NAME)

RN 76667-19-1 CAPLUS

CN Morpholine, 4-[(3,4-dihydro-6,7-dimethoxy-1,1-dioxido-2H-1,2-benzothiazin-

3-yl)carbonyl]- (9CI) (CA INDEX NAME)

RN 76667-22-6 CAPLUS

CN Piperazine, 1-[(3,4-dihydro-6,7-dimethoxy-1,1-dioxido-2H-1,2-benzothiazin-

3-yl)carbonyl]-4-phenyl- (9CI) (CA INDEX NAME)

RN 76667-40-8 CAPLUS

CN Pyrrolidine, 1-[(3,4-dihydro-6,7-dimethoxy-2-methyl-1,1-dioxido-2H-1,2-benzothiazin-3-yl)carbonyl]- (9CI) (CA INDEX NAME)

RN 76667-41-9 CAPLUS

CN Piperidine, 1-[(3,4-dihydro-6,7-dimethoxy-2-methyl-1,1-dioxido-2H-1,2-benzothiazin-3-yl)carbonyl]- (9CI) (CA INDEX NAME)

RN 76667-50-0 CAPLUS
CN Piperazine, 1-(4-chlorophenyl)-4-[(3,4-dihydro-6,7-dimethoxy-2-methyl1,1dioxido-2H-1,2-benzothiazin-3-yl)carbonyl]- (9CI) (CA INDEX NAME)

RN 76667-73-7 CAPLUS
CN Morpholine, 4-[[3,4-dihydro-6,7-dimethoxy-1,1-dioxido-2-(phenylmethyl)-2H1,2-benzothiazin-3-yl]carbonyl]- (9CI) (CA INDEX NAME)

```
L9
     ANSWER 37 OF 49 CAPLUS COPYRIGHT 2002 ACS
     1974:413538 CAPLUS
AN
DN
     81:13538
     4-Hydroxy-3-carbamoyl-2H-1,2-benzothiazine 1,1-dioxides and
TI
     4-hydroxy-3(2H)-1,2-benzothiazine carboxylate-1,1-dioxides
     Sircar, Jagadish C.; Zinnes, Harold; Shavel, John, Jr.
IN
     Warner Lambert Co.
PA
SO
     U.S., 18 pp.
     CODEN: USXXAM
DΤ
     Patent
LA
     English
FAN.CNT 1
     PATENT NO.
                      KIND DATE
                                           APPLICATION NO.
                                                            DATE
    US 3808205
                                                             19720508
                       Α
                            19740430
                                           US 1972-251163
PΙ
PRAI US 1971-179570
                            19710910
     For diagram(s), see printed CA Issue.
GΙ
     4-(1-Pyrrolidinyl)-2-methyl-2H-1,2-benzothiazine-3-carbonyl chloride (I,
AΒ
R
     = 1-pyrrolidinyl, R1 = COCl), obtained by reaction of I (R =
     1-pyrrolidinyl, R1 = H) with COCl2, was treated with the appropriate
    primary or secondary amines to give I [R = 1-pyrro-lidinyl; R1 =
CONR2R3,
     R2R3 = Me, Ph, Et, 1-adamantyl, 2-thienyl, H, or NR2R3 = 1-indolinyl,
     3,4-dihydro-1(2H)-quinolyl, 1-aziridinyl), which were hydrolyzed (HCl)
to
     give I (R = OH), useful as antiinflammatory agents. Thus, I (R =
     1-pyrrolidinyl, R1 = COCl) was refluxed 16 hr with PhNHMe in THF contg.
     Et3N to give I (R = 1-pyrrolidinyl, R1 = CONMePh), which was refluxed 1
hr
     in 3N HCl to give I (R = OH, R1 = CONMePh).
     40713-59-5P 40713-60-8P 40713-62-0P
ΙT
     40713-69-7P 40713-70-0P 40713-71-1P
     52853-59-5P
    RL: SPN (Synthetic preparation); PREP (Preparation)
        (prepn. of)
     40713-59-5 CAPLUS
RN
    1H-Indole, 2,3-dihydro-1-[(4-hydroxy-2-methyl-1,1-dioxido-2H-1,2-
CN
    benzothiazin-3-yl)carbonyl]- (9CI) (CA INDEX NAME)
         ОН
```

RN 40713-60-8 CAPLUS

CN Quinoline, 1,2,3,4-tetrahydro-1-[(4-hydroxy-2-methyl-1,1-dioxido-2H-1,2-

benzothiazin-3-yl)carbonyl]- (9CI) (CA INDEX NAME)

RN 40713-62-0 CAPLUS

CN Pyrrolidine, 1-{(4-hydroxy-2-methyl-1,1-dioxido-2H-1,2-benzothiazin-3-yl)carbonyl}- (9CI) (CA INDEX NAME)

RN 40713-69-7 CAPLUS

CN 1H-Indole, 2,3-dihydro-1-[[2-methyl-1,1-dioxido-4-(1-pyrrolidinyl)-2H-1,2-

benzothiazin-3-yl]carbonyl]- (9CI) (CA INDEX NAME)

RN 40713-70-0 CAPLUS

CN Quinoline, 1,2,3,4-tetrahydro-1-[[2-methyl-1,1-dioxido-4-(1-

pyrrolidinyl)-

2H-1,2-benzothiazin-3-yl]carbonyl]- (9CI) (CA INDEX NAME)

RN 40713-71-1 CAPLUS

CN Pyrrolidine, 1-[[2-methyl-1,1-dioxido-4-(1-pyrrolidinyl)-2H-1,2-benzothiazin-3-yl]carbonyl]- (9CI) (CA INDEX NAME)

RN 52853-59-5 CAPLUS

CN Aziridine, 1-[[2-methyl-1,1-dioxido-4-(1-pyrrolidinyl)-2H-1,2-benzothiazin-

3-yl]carbonyl]- (9CI) (CA INDEX NAME)

ANSWER 38 OF 49 CAPLUS COPYRIGHT 2002 ACS L9 1974:48016 CAPLUS AN 80:48016 DN Therapeutically active dihydrobenzothiazine-s-dioxides ΤI Sianesi, Enrico; Da Re, Paulo; Setnikar, Ivo; Massarani, Elena IN Recordati, S. A. Chemical and Pharmaceutical Co. PA U.S., 7 pp. so CODEN: USXXAM DT Patent English LΑ FAN.CNT 1 KIND DATE PATENT NO. APPLICATION NO. DATE US 3770733 US 1971-176254 19731106 19710830 PΙ Α Benzothiazinylalkylcarboxamides I (X = CH2, R = H, R1 = H, Me, Et, Pr, CHMe2, Bu, CHMeEt, CMe3, allyl, propargyl, NMe2, NH2, NHEt, NMePh, N: CHMe, NRR1 = NMe2, NEt2, N(CHMe2)2, morpholino, piperidino, pyrrolidino, 4-methylpiperazino; X = CH2CH2, R = H, R1 = CHMe2; X = CMe2, NRR1 = NH2, NHMe, NHCHMe2, NHNMe2) were prepd. for use as hypnotics and anticonvulsants. Thus, o-NCCH2C6H4NH2.HCl was diazotized, and treated with SO2 and CuCl to give o-NCCH2C6H4SO2Cl, which on treatment with NH3 gave o-NCCH2C6H4SO2NH2, followed by cyclization to II (R2 = H). Treatment with BrCH2CO2Et gave II (R2 = CH2CO2Et), which with NH3 gave I (X = CH2, R = R1 = H), having an anticonvulsant ED50 in mice of 50 mg/kg ip. IT 35263-33-3P 35263-34-4P 35263-35-5P 35263-36-6P RL: SPN (Synthetic preparation); PREP (Preparation) (prepn. of) RN 35263-33-3 CAPLUS Morpholine, 4-[(3,4-dihydro-1,1-dioxido-2H-1,2-benzothiazin-2yl)acetyl]-(9CI) (CA INDEX NAME)

RN 35263-34-4 CAPLUS
CN Piperidine, 1-[(3,4-dihydro-1,1-dioxido-2H-1,2-benzothiazin-2-yl)acetyl](9CI) (CA INDEX NAME)

RN 35263-36-6 CAPLUS
CN Piperazine, 1-[(3,4-dihydro-1,1-dioxido-2H-1,2-benzothiazin-2-yl)acetyl]-4methyl- (9CI) (CA INDEX NAME)

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L9 ANSWER 40 OF 49 CAPLUS COPYRIGHT 2002 ACS
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AN 1973:92403 CAPLUS

DN 78:92403

TI 1,2-Benzothiazines. 6. 3-Carbamoyl-4-hydroxy-2H-1,2-benzothiazine 1,1-dioxides as antiinflammatory agents

AU Zinnes, Harold; Lindo, Neil A.; Sircar, Jagadish C.; Schwartz, Martin L.;

Shavel, John, Jr.

CS Dep. Org. Chem., Warner-Lambert Res. Inst., Morris Plains, N. J., USA

SO J. Med. Chem. (1973), 16(1), 44-8 CODEN: JMCMAR

DT Journal

LA English

AB 4-Hydroxy-2-methyl-N-phenyl-2H-1,2-benzothiazine-3-carboxanilide 1,1-dioxide (I) [38859-30-2] (100 mg/kg orally) was approx. as active an antiinflammatory agent as phenylbutazone [50-33-9] against carrageenin-induced rat paw edema. Various derivs. of I tested were

less

active or inactive. A new method for synthesis of I and its derivs. involved the reaction of the known 2-substituted-4-(1-pyrrolidino)-2H-

1,2 benzothiazine 1,1-dioxide with phosgene in the presence of Et3N to form
 the 3-chloroformyl deriv., which reacted with the appropriate amine;
acid

hydrolysis yielded the desired compd.

IT 40713-59-5 40713-60-8 40713-62-0 40713-69-7 40713-70-0 40713-71-1

RL: BIOL (Biological study) (inflammation inhibitor)

RN 40713-59-5 CAPLUS

CN 1H-Indole, 2,3-dihydro-1-[(4-hydroxy-2-methyl-1,1-dioxido-2H-1,2-benzothiazin-3-yl)carbonyl]- (9CI) (CA INDEX NAME)

RN 40713-60-8 CAPLUS

CN Quinoline, 1,2,3,4-tetrahydro-1-[(4-hydroxy-2-methyl-1,1-dioxido-2H-1,2-benzothiazin-3-yl)carbonyl]- (9CI) (CA INDEX NAME)

RN 40713-62-0 CAPLUS

CN Pyrrolidine, 1-[(4-hydroxy-2-methyl-1,1-dioxido-2H-1,2-benzothiazin-3-yl)carbonyl]- (9CI) (CA INDEX NAME)

RN 40713-69-7 CAPLUS

CN 1H-Indole, 2,3-dihydro-1-[[2-methyl-1,1-dioxido-4-(1-pyrrolidinyl)-2H-1,2-

benzothiazin-3-yl]carbonyl]- (9CI) (CA INDEX NAME)

RN 40713-70-0 CAPLUS

CN Quinoline, 1,2,3,4-tetrahydro-1-[[2-methyl-1,1-dioxido-4-(1-pyrrolidinyl)-

2H-1,2-benzothiazin-3-yl]carbonyl]- (9CI) (CA INDEX NAME)

RN 40713-71-1 CAPLUS

CN Pyrrolidine, 1-[[2-methyl-1,1-dioxido-4-(1-pyrrolidinyl)-2H-1,2-benzothiazin-3-yl]carbonyl]- (9CI) (CA INDEX NAME)

```
76:72535
DN
     3,4-Dihydro-2H-1,2-benzothiazine-2-acetamide S,S-dioxide derivatives
ΤI
     Sianesi, Enrico; Da Re, Paolo; Setnikar, Ivo; Massarani, Elena
IN
     Recordati S. A. Chemical and Pharmaceutical Co.
PA
     Ger. Offen., 43 pp.
SO
     CODEN: GWXXBX
DT
     Patent
LΑ
     German
FAN.CNT 1
     PATENT NO.
                     KIND DATE
                                          APPLICATION NO. DATE
                     ____
                      Α
     DE 2124953
                           19711216
                                          DE 1971-2124953 19710519
PΙ
     DE 2124953
                      В2
                           19741114
                      C3
                           19750703
    DE 2124953
                                                           19710129
                                          BE 1971-99171
     BE 762273
                     A1 19710701
     ES 388284
                     A1
                           19740216
                                          ES 1971-388284
                                                           19710215
                                          CH 1971-523906
    CH 523906
                           19720615
                                                           19710219
                      Α
                                          CH 1971-527841
    CH 527841
                           19720915
                                                           19710219
                      Α
                      A1
                                          IL 1971-36248
     IL 36248
                           19730730
                                                           19710222
    NL 7102509
                           19711214
                                          NL 1971-2509
                                                           19710225
                      Α
                                          FR 1971-13767
     FR 2094180
                      A5
                           19720204
                                                           19710419
    FR 2094180
                      B1
                           19741018
    ZA 7103102
                      Α
                           19720126
                                          ZA 1971-3102
                                                           19710512
                                          GB 1971-19514
                                                           19710608
    GB 1337478
                      Α
                           19731114
PRAI IT 1970-25826
                           19700611
     For diagram(s), see printed CA Issue.
GΙ
     Title compds. (I), sedatives and hypnotics, were prepd. by reaction of
AB
     amines with I (R = OEt or Cl) or by reaction of 3,4-dihydro-2H-1,2-
    benzothiazine S,S-dioxide (II) with Na alkoxides and ClQCOR. Thus, 7.15
g
    I (Q = CH2, R = OEt) kept 4 hr with NH3-satd. MeOH at room temp. and
    briefly refluxed, gave 5.3 g I (Q = CH2, R = NH2). Similarly prepd.
were
    27 addnl. I, e.g. (Q and R given): CHEt, NH2; CH2, NHNH2; CH2, NHPr
     (III); CMe2, NMe2; CH2, morpholino. Many I were tested in mice, e.g.
III
    had LD50 560 mg/kg on i.p. administration, the hypnotic effect was ED50
    122 mg/kg and the sedative effect ED50 = 28 mg/kg on oral
administration.
    35263-33-3P 35263-34-4P 35263-35-5P
IT
    35263-36-6P
    RL: SPN (Synthetic preparation); PREP (Preparation)
        (prepn. of)
RN
    35263-33-3 CAPLUS
    Morpholine, 4-[(3,4-dihydro-1,1-dioxido-2H-1,2-benzothiazin-2-
yl)acetyl]-
     (9CI) (CA INDEX NAME)
```

ANSWER 41 OF 49 CAPLUS COPYRIGHT 2002 ACS

1972:72535 CAPLUS

L9 AN

RN 35263-34-4 CAPLUS

CN Piperidine, 1-[(3,4-dihydro-1,1-dioxido-2H-1,2-benzothiazin-2-yl)acetyl]-

(9CI) (CA INDEX NAME)

RN 35263-35-5 CAPLUS

CN Pyrrolidine, 1-[(3,4-dihydro-1,1-dioxido-2H-1,2-benzothiazin-2-yl)acetyl]-

(9CI) (CA INDEX NAME)

RN 35263-36-6 CAPLUS

CN Piperazine, 1-[(3,4-dihydro-1,1-dioxido-2H-1,2-benzothiazin-2-yl)acetyl]-4-

methyl- (9CI) (CA INDEX NAME)

```
ANSWER 42 OF 49 CAPLUS COPYRIGHT 2002 ACS
L9
    1971:476818 CAPLUS
AN
DN
    75:76818
ΤI
     2,1-Benzothiazine derivatives
IN
    Nakanishi, Michio; Kobayashi, Ryosuke
    Yoshitomi Pharmaceutical Industries, Ltd.
PA
SO
     Jpn. Tokkyo Koho, 2 pp.
    CODEN: JAXXAD
    Patent
DT
     Japanese
ĽΑ
FAN.CNT 1
                     KIND DATE
                                         APPLICATION NO. DATE
     PATENT NO.
     _____
                                         _____
                     ____
                          _____
    JP 46022150 B4
                                                          19690409
PΙ
                           19710623
                                         JΡ
GI
    For diagram(s), see printed CA Issue.
    I (Y = amino group) (Ia) (X = H, Cl, Me), useful as diuretics,
AΒ
     antiinflammatory agents, antispasmodics, etc., were manufd. by
aminolysis
    of I (Y = halo) (Ib). E.g., Ib (Y = Cl, X = H) was heated 3 hr at
    70-80.degree. with 30% NHMe2 in an autoclave to give Ia (Y = piperidino,
X
    = H). Similarly prepd. were 4 other Ia.
ΙT
    33367-70-3P
    RL: SPN (Synthetic preparation); PREP (Preparation)
       (prepn. of)
    33367-70-3 CAPLUS
RN
    1H-2,1-Benzothiazine-3-carboxylic acid, 4-hydroxy-1-(3-
CN
piperidinopropyl)-,
    ethyl ester, 2,2-dioxide (8CI) (CA INDEX NAME)
```

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ANSWER 43 OF 49 CAPLUS COPYRIGHT 2002 ACS
L9
AN
     1971:476815 CAPLUS
    75:76815
DN
     1,2-Benzothiazine compounds
ΤI
     Hasegawa, Gen; Munakata, Tomohiko; Furuta, Tetsuya; Tsuda, Tachimi
IN
    Yoshitomi Pharmaceutical Industries, Ltd.
PA
     Jpn. Tokkyo Koho, 3 pp.
SO
    CODEN: JAXXAD
DT
     Patent
     Japanese
LΑ
FAN.CNT 1
                      KIND DATE
                                           APPLICATION NO. DATE
     PATENT NO.
     JP 46022027
                    B4
                            19710622
                                           JP
                                                            19690118
PΙ
    For diagram(s), see printed CA Issue.
    I (X = Cl, Br, OMe, Me, H; Y = aminoalkyl; Z = O, S), useful as
AΒ
diuretics,
    antiinflammatants, antibacterials, etc., are manufd. 3-(2-
Thienylcarbonyl)-
     3,4-dihydro-2H - 1,2 - benzothiazin - 4 - one 1,1-dioxide, in a mixt. of
    NaOH, EtOH, and H2O, is treated with 2-morpholinoethyl chloride to give
Ι
     (X = H, Y = morpholinoethyl, Z = S); hydrochloride m. 235-7.degree..
    Similarly prepd. are 10 more I.
    33215-46-2P
ΙT
    RL: SPN (Synthetic preparation); PREP (Preparation)
        (prepn. of)
RN
    33215-46-2 CAPLUS
     4H-1,2-Benzothiazin-4-one, 2,3-dihydro-2-(2-morpholinoethyl)-3-(2-
CN
thenoyl) -
     , 1,1-dioxide, monohydrochloride (8CI) (CA INDEX NAME)
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HC1

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ANSWER 45 OF 49 CAPLUS COPYRIGHT 2002 ACS
L9
AN
     1971:141828 CAPLUS
     74:141828
DN
ΤI
     1,2-Benzothiazines
     Hasegawa, Gen; Munakata, Tomohiko; Yoshida, Tetsuya; Tsumagari, Tatsumi
IN
     Yoshitomi Pharmaceutical Industries, Ltd.
PA
     Jpn. Tokkyo Koho, 5 pp.
SO
     CODEN: JAXXAD
DT
     Patent
LΑ
     Japanese
FAN.CNT 1
     PATENT NO.
                      KIND DATE
                                           APPLICATION NO.
     ______
                      ____
                                                            19680318
     JP 46000029
                      B4
                            19710105
                                           JΡ
ΡI
GI
     For diagram(s), see printed CA Issue.
     3-Benzoyl-3,4-dihydro-2H-1,2-benzothiazin-4-one 1,1-dioxide (5 g) in 19
AΒ
ml
    N NaOH, 13 ml H2O, and 63 ml EtOH was stirred overnight with
    prperidinoethyl chloride (from 3.7 g HCl salt) to give 3.5 g I (R = Ph,
Х
     = CH2CH2, NY2 = piperidino), m. 215-18.degree.. Similarly, I were
prepd.
     (R, X, Y, or NY2, and m.p. given): Me, (CH2)3, Pr, 173-5.degree.;
    p-C1C6H4, (CH2)3, morpholino, 210-12.degree. (HCl salt); Ph, CH2CHMeCH2,
     4-phenyl-1-piperazino, 218-21.degree. (HCl salt). Also prepd. were 7-
Cl,
     6-MeO, and other analogs, in which R was Me3C, 3,4-ClC6H3, p-anisly1,
    p-tolyl, cyclohexyl, or similar residues.
    31848-42-7P 31858-76-1P 32650-75-2P
IT
    RL: SPN (Synthetic preparation); PREP (Preparation)
        (prepn. of)
    31848-42-7 CAPLUS
RN
    4H-1,2-Benzothiazin-4-one, 3-(p-chlorobenzoyl)-2,3-dihydro-2-(3-
CN
    morpholinopropyl)-, 1,1-dioxide, hydrochloride (8CI) (CA INDEX NAME)
```

●x HCl

RN 31858-76-1 CAPLUS

CN 4H-1,2-Benzothiazin-4-one, 3-benzoyl-2,3-dihydro-2-(2-piperidinoethyl)-, 1,1-dioxide (8CI) (CA INDEX NAME)

RN 32650-75-2 CAPLUS

CN 4H-1,2-Benzothiazin-4-one, 3-benzoyl-2,3-dihydro-2-[2-methyl-3-(4-phenyl-1-

piperazinyl)propyl]-, 1,1-dioxide, hydrochloride (8CI) (CA INDEX NAME)

●x HCl

L9 ANSWER 46 OF 49 CAPLUS COPYRIGHT 2002 ACS

AN 1970:520647 CAPLUS

DN 73:120647

TI Isomeric 3,4-dihydro-2H-1,2-benzothiazine 1,1-dioxides valuable for their

chemotherapeutic qualities

IN Lombardino, Joseph G.

PA Pfizer, Chas., and Co., Inc.

SO Ger. Offen., 67 pp.

CODEN: GWXXBX

DT Patent

LA German

FAN.CNT 1

(X

	PA:	TENT NO.	KIND	DATE	APPLICATION NO. DATE			
ΡI	DE	1943265	Α	19700813	DE	1969-1943265	19690826	
	DE	1943265	В2	19810514				
	DE	1943265	C3	19820204				
	US	3591584	Α	19710706	US	1968-767594	19680827	
	GB	1257180	Α	19711215		1968-1257180	19681231	
	NO	129746	В	19740520		1969-3274	19690812	
	BR	6911817	A 0	19730213		1969-211817	19690825	
	FI	51189	В	19760802		1969-2460	19690825	
	BE	737962	Α	19700226	BE	1969-737962	19690826	
	NL	6912981	Α	19700303	NL	1969-12981	19690826	
	NL	157013	В	19780615				
	ES	370861	A1	19710701		1969-370861	19690826	
		294113	В	19711110		1969-8146	19690826	
		520705	Α	19720331		1969-520705	19690826	
	ΑT	298503	В	19720510		1970-9366	19690826	
	CH	527840	Α	19720915		1969-527840	19690826	
	DE	1967325	B2	19810813	DE	1969-1967325	19690826	
	DE	1967325	C2	19820318				
	DK	145297	В	19821025	DK	1969-4570	19690826	
	DK	145297	С	19830314				
	FR	2016455	A 5	19700508	FR	1969-29284	19690827	
	FR	2016455	B1	19740201				
	JP	50000677	B4	19750110		1969-67265	19690827	
	SE	373854	В	19750217		1969-11871	19690827	
		402459	С	19781012	SE	1973-511	19730115	
	JP	51042114	В4	19761113	JP	1973-82782	19730724	
PRAI	US	1968-767594		19680827				

GI For diagram(s), see printed CA Issue.

AB I or II (.apprx.160) (Z = S or O) nonsteroidal antiinflammatory agents, were prepd. by treating III where X = H, H and Q = O or vice versa with R2NCZ in the presence of base or by treating III where X = O and Q = C carbalkoxy or vice versa with amines. Thus, III (X = H, H; Q = O; R1 =

Me, R3 = H) (IV) was prepd. by cyclodehydration of o-HO2CCH2C6H4SO2NHMe (prepd. by carboxylation of 2-MeC6H4SO2NHMe in the presence of BuLi). Treating IV with o-ClC6H4NCO in Me2SO in the presence of Et3N 20 hr at 25.degree. gave 46% II (Z = O, R1 = Me, R2 = o-ClC6H4NH, R3 = H). III

^{= 0;} Q = H, CO2Me; R1 = R3 = H), prepd. by rearrangement of V in the presence of NaOMe in dry DMF, was treated with MeI to give the 2-Me deriv., which was treated with PhNH2 in dry AcNMe2 in the presence of p-MeC6H4SO3H to give 35% I (Z = O; R1 = Me; R2 = NHPh, R3 = H).

IT 29152-13-4P

RL: SPN (Synthetic preparation); PREP (Preparation) (prepn. of)

RN 29152-13-4 CAPLUS

CN Piperidine, 1-[(3,4-dihydro-2-methyl-4-oxo-2H-1,2-benzothiazin-3-yl)carbonyl]-, S,S-dioxide (8CI) (CA INDEX NAME)

```
L9
      ANSWER 47 OF 49 CAPLUS COPYRIGHT 2002 ACS
 AN
      1968:402923 CAPLUS
      69:2923
 DN
 ΤI
      Benzothiazines. I. 1H-2,1-benzothiazine 2,2-dioxides
      Sianesi, Enrico; Redaelli, Riccardo
 AU
 CS
      Div. Ric., Recordati s.a.s., Milan, Italy
      Ann. Chim. (Rome) (1967), 57(11), 1426-30
 SO
      CODEN: ANCRAI
 DT
      Journal
      Italian
 LΑ
 GΙ
      For diagram(s), see printed CA Issue.
      Mixts. of compds. of the general formula I, which are prepd., are heated
 AΒ
      in NaOH to give compds. of the general formula II. Thus, 3.81 g.
      PhCH2SO2Cl is slowly added to a soln. of 2.7 g. o-H2NC6H4Ac in 10 ml.
      pyridine as the mixt. is cooled and the mixt. kept 10-15 min. to give
76%
      o-(phenyl-methylsulfonylamino)acetophenone, m. 119-20.degree. (aq.
 EtOH).
      Similarly prepd. are the following I (R, R1, R2, R3, m.p., and % yield
      given): Ph, H, H, Cl, 133-5.degree. (aq. EtOH), 72; Ph, H, H, AcNH,
      156-8.degree. (aq. EtOH), 46; Ph, H, AcNH, H, 147-8.degree. (aq. EtOH),
      52; H, H, H, Cl, 129-31.degree. (iso-PrOH), 40; H, Me, H, Cl, 75-
 7.degree.
      (iso-PrOH), 67. A soln. of 9.0 g. I (R = Ph, R1 = R2 = H, R3 = AcNH) in
      40 ml. 4N NaOH is refluxed 5 hrs. to give 85% 3-phenyl-4-methyl-6-amino-
 1H-
      2,1-benzothiazine 2,2-dioxide, m. 194-6.degree. (aq. EtOH). Similarly
      prepd. are the following II (R, R1, R2, R3, m.p., and % yield given):
 Ph,
      H, H, H, 211.degree. (aq. EtOH), 81; Ph, H, H, Cl, 200-2.degree. (aq.
      EtOH), 76; Ph, H, NH2, H, 168-70.degree. (aq. EtOH), 69; H, Me, H, Cl,
      141-3.degree. (iso-PrOH), 90; Ph, Et, H, H, 147-9.degree. (EtOH), 62;
 Ph,
      allyl, H, H, 115.degree. (aq. EtOH), 55; Ph, propargyl, H, H,
      198-200.degree. (EtOH), 41; Ph, Et, H, Cl, 121-6.degree. (aq. EtOH), 77;
      Ph, CH2CH2NMe2, H, H, -, 54 [HCl salt m. 243-6.degree. (EtOH)]; Ph,
      2-piperidinoethyl, H, H, -, 64 [HCl salt m. 208-12.degree. (EtOH)]; Ph,
      CH2CH2NMe2, H, Cl, -, 60 [HCl salt m. 230-3.degree. (EtOH)]; Ph,
      2-piperidinoethyl, H, Cl, -, 63 [HCl salt m. 234-8.degree. (EtOH)]; Ph,
      CH2Cl2Et, H, H, 102-4.degree. (aq. EtOH), 78; Ph, CH2Cl2Et, H, Cl,
      135.5-8.5.degree. (aq. EtOH), 74; Ph, CH2CONMe2, H, H, 221-4.degree.
      (MeOH), 81; Ph, CH2CONMe2, H, Cl, 214-16.degree. (EtOH), 84; Ph,
 CH2CONH2,
     H, H, 229-32.degree., 93; Ph, CH2CO2H, H, H, 208-10.degree. (aq. EtOH),
 87
      [Na salt m. 327-31.degree. (decompn.) (EtOH-MeOH)]; Ph, CH2CO2H, H, Cl,
      230-3.degree. (iso-PrOH), 86 [Na salt m. 329-31.degree. (decompn.)
      (EtOH)].
 IT
      19880-23-0P 19880-25-2P
      RL: SPN (Synthetic preparation); PREP (Preparation)
         (prepn. of)
 RN
     19880-23-0 CAPLUS
 CN
     1H-2,1-Benzothiazine, 4-methyl-3-phenyl-1-(2-piperidinoethyl)-,
```

2,2-dioxide, monohydrochloride (8CI) (CA INDEX NAME)

● HCl

RN 19880-25-2 CAPLUS

CN 1H-2,1-Benzothiazine, 6-chloro-4-methyl-3-phenyl-1-(2-piperidinoethyl)-, 2,2-dioxide, monohydrochloride (8CI) (CA INDEX NAME)

HC1

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ANSWER 48 OF 49 CAPLUS COPYRIGHT 2002 ACS
AN
     1967:411496 CAPLUS
DN
     67:11496
     New dibenzothiazine derivatives
TI
PA
     Imperial Chemical Industries Ltd.
SO
     Neth. Appl., 31 pp.
     CODEN: NAXXAN
DT
     Patent
LΑ
    Dutch
FAN.CNT 1
     PATENT NO. KIND DATE
                                         APPLICATION NO. DATE
     ______
                                          _____
PΙ
    NL 6604835
                           19661014
PRAI GB
                           19650413
    GB
                           19651027
    Various methods are given for the prepn. of the title compds. which are
AΒ
    valuable pharmaceutics. Thus, 23 parts of a 10% soln. of
     .beta.-diethylaminoethyl chloride in C6H6 was added to 4 parts
     6H-dibenzo[c,e][1,2]thiazine 5,5-dioxide dissolved in 0.44 part Na in 75
    parts EtOH, the mixt. stirred, refluxed 3 hrs., cooled, and filtered,
the
     filtrate evapd. to dryness, the residue washed with H2O and filtered,
the
    solid residue dissolved in Et20, the Et20 soln. dried and filtered, the
     filtrate treated with HCl in Et20 until amost no HCl pptd., Et20
     the hydrochloride treated with Me2CO, the mixt. filtered, the solid
    hydrochloride (m. 206-8.degree.) dissolved in warm H2O, the base freed
by
     the addn. of an aq. NH4OH soln., and the mixt. filtered to give
    6-(.beta.-diethylaminoethyl)-6H-dibenzo[c,e][1,2]thiazine 5,5-dioxide,
m.
    79-80.degree. (aq. EtOH or petr. ether, b. 60-80.degree.). Similarly
were
    obtained 6-(.beta.-dimethylaminoethyl)-6H-dibenzo[c,e][1,2]thiazine
    5,5-dioxide, m. 106-7.degree. (petr. ether b. 60-80.degree.), and
     6-(.gamma.-dimethylaminopropyl)-6H-dibenzo[c,e][1,2]thiazine 5,5-
dioxide,
    m. 97-8.degree. (petr. ether, b. 60-80.degree.), by replacement of
     .beta.-diethylaminoethyl chloride by .beta.-dimethylaminoethyl chloride
    and .gamma.-dimetyhlaminopropyl chloride, resp. Reflux of a mixt. of 20
    parts 6-(.beta.-phthalimidoethyl)-6H-dibenzo[c,e][1,2]thiazine 5,5-
dioxide
     (I), 450 parts EtOH, and 6 parts hydrazine hydrate 2 hrs., followed by
    cooling, acidification with 20% HCl, filtration, and further workup gave
    6-.beta.-aminoethyl)-6H-dibenzo[c,e][1,2]thiazine 5,5-dioxide oxalate
     (II), m. 212-13.degree. (decompn.) (H2O). Treatment of II with excess
KOH
    and extn. of the mixt. with CHCl3 gave 6-(.beta.-aminoethyl)-6H-
    dibenzo[c,e][1,2]thiazine 5,5-dioxide, m. 74-6.degree. (C6H6-petr.
ether).
    I was prepd. as follows: 1 part 50% dispersion of NaOH in oil was added
to
    5 parts 6H-dibenzo[c,e][1,2]thiazine 5,5-dioxide in 25 parts anhyd.
    dimethylformamide (DMF), 5 parts N-2-bromoethylphthalimide in 15 parts
    anhyd. DMF added after complete reaction, and the mixt. stirred, heated
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L9

to

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95-100.degree. 1 hr., cooled, dild. with H2O, and filtered to give I, m.
     176-7.degree. (C6H6). Reflux of a mixt. of 6-(.beta.-3.4 parts
     bromoethyl)-6H-dibenzo[c,e][1,2]thiazine 5,5-dioxide, 1.9 parts K
     phthalimide, and 25 parts DMF 1 hr. at 60.degree. also gave I, m.
     176-7.degree. (C6H6). Reflux of a mixt. of 5 parts 7-chloro-6H-
     dibenzo[c,e][1,2]thiazine 5,5-dioxide (III), 0.9 part Na in 90 parts
EtOH,
     and 3.5 parts .beta.-diethylaminoethyl chloride hydrochloride 4 hrs.
gave
     7-chloro-6-(.beta.-diethylaminoethyl)-6H-dibenzo[c,e][1,2]thiazine
     5,5-dioxide, m. 125-6.degree. (EtOH). Similarly were prepd.
     2-chloro-6-(.gamma.-dimethylaminopropyl)-6H-dibenzo[c,e][1,2]thiazine
     5,5-dioxide (IV), IV oxalate, m. 160-2.degree. (decompn.) (EtOH),
     6-(.beta.-diisopropylaminoethyl)-6H-dibenzo[c,e][1,2]thiazine 5,5-
dioxide,
     m. 101-2.degree. (petr. ether, b. 60-80.degree.). III was prepd. as
     follows: 12 parts o-amino-o'-chlorobenzenesulfonanilide (m. 87-
     in 100 parts EtOH was mixed with 2.8 parts NaNO2 in 28 parts H2O and the
     mixt. added to 16 parts concd. HCl and 8 parts H2O at 0-5.degree., the
     mixt. stirred, 20 parts NaOAc added, the mixt. filtered, the residue
added
     to a suspension of 1 part Cu powder in 5 parts NaOH and 160 parts H2O,
the
     mixt. stirred and heated until no reaction when treated with
     .beta.-naphthol, the mixt. treated with charcoal, filtered while hot,
and
     the filtrate cooled and treated with AcOH to give III, m. 184-5.degree.
     (EtOH). Similarly was prepd. 2-chloro-6H-dibenzo[c,e][1,2]thiazine
     5,5-dioxide, m. 203-4.degree. (iso-PrOH). Also prepd. were
     7-bromo-6-(.beta.-diethylaminoethyl)-6H-dibenzo[c,e][1,2]thiazine
     5,5-dioxide, m. 126-7.degree. (petr. ether, b. 100-120.degree.),
     6-(.beta.-diethylaminoethyl)-2-methyl-6H-dibenzo[c,e][1,2]thiazine
     5,5-dioxide, m. 90-1.degree. (petr. ether, b. 60-80.degree.),
     6-(.beta.-dimethylaminopropyl)-6H-dibenzo[c,e][1,2]thiazine 5,5-dioxide,
     m. 129-30.degree. (iso-PrOH). A mixt. of 5 parts 6-(.beta.-bromoethyl)-
бн-
     dibenzo[c,e][1,2]thiazine 5,5-dioxide (V), 20 parts DMF, and 20 parts
70%
     EtNH2 in H2O was refluxed 18 hrs., the non-converted reactants removed,
     and the residue worked up to give 6-(.beta.-ethylaminoethyl) - 6H -
     dibenzo[c,e][1,2]thiazine 5,5-dioxide hydrochloride, m. 198-9.degree..
v,
     m. 105-6.degree. (EtOH), was prepd. by refluxing a mixt. of 18.4 parts
     6H-dibenzo[c,e][1,2]thiazine 5,5-dioxide in a soln. of NaOEt (1.84 parts
     Na in 200 parts EtOH) and 36 parts BrCH2CH2Br. Similarly were obtained
     6-(.beta.-methylaminoethyl) - 6H - dibenzo[c,e][1,2]thiazine 5,5 -
     oxalate, m. 210-11.degree. (H2O), 6-(.beta.-ethylaminoethyl)-6H-
     dibenzo[c,e][1,2]thiazine 5,5-dioxide hydrochloride, m. 198-9.degree.
     (EtOH), 6-[.beta.-(N - .beta. - hydroxyethyl - N - methylamino)ethyl]-6H
     dibenzo[c,e][1,2]thiazine 5,5-dioxide oxalate, m. 170.degree. (decompn.)
     (MeOH), 6-(.beta.-butylaminoethyl)-6H-dibenzo[c,e][1,2]thiazine
     5,5-dioxide hydrochloride, m. 194-6.degree. (MeOH). A mixt. of 9.6
parts
     6-(.gamma.-bromopropyl)-6H-dibenzo[c,e][1,2]thiazine 5,5-dioxide, 40
```

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parts
     DMF, and 40 parts 40% MeNH2 in H2O was refluxed 18 hrs. to give
     6-(.qamma.-methylaminopropyl)-6H-dibenzo[c,e][1,2]thiazine 5,5-dioxide
     oxalate, m. 202-3.degree. (decompn.) (H2O). Similarly was prepd.
     6-(4-dimethylaminobutyl)-6H-dibenzo[c,e][1,2]thiazine 5,5-dioxide
oxalate.
     m. 151-2.degree. (EtOH). A mixt. of 1 part 6-(.beta.-
dimethylaminoethyl) -
     6H-dibenzo[c,e][1,2]thiazine 5,5-dioxide, 1 part MeI, and 150 parts
anhyd.
     Et20 was kept 18 hrs. at room temp. and the mixt. filtered to give
     6-(.beta.-dimethylaminoethyl)-6H-dibenzo[c,e][1,2]thiazine 5,5-dioxide
     methiodide, m. 264-5.degree. (decompn.) (MeOH). Hydrogenation of 1.5
     parts 6-[.beta.-(N-benzyl-N-isopropylamino)ethyl]-6H-
     dibenzo[c,e][1,2]thiazine 5,5-dioxide in 50 parts dioxane with 1 part
10%
     Pd-C catalyst gave 6-(.beta.-isopropylaminoethyl)-6H-
     dibenzo[c,e][1,2]thiazine 5,5-dioxde oxalate, m. 218.degree. (decompn.)
     (MeOH), after reaction of the hydrogenation product with oxalic acid.
     Hydrogenation of 1 part 6-(.beta.-aminoethyl)-6H-
dibenzo[c,e][1,2]thiazine
     5,5-dioxide in 50 parts Me2CO with 0.5 part Pt oxide catalyst, and
     treatment of the product with oxalic acid gave 6-(.beta.-
     isopropylaminoethyl)-6H-dibenzo[c,e][1,2]thiazine 5,5-dioxide, oxalate,
m.
     218.degree. (decompn.) (MeOH). To a stirred mixt. of 1 part LiAlH4 in
50
     parts anyd. dimethoxyethane was added 3 parts 6-cyanomethyl-6H-
     dibenzo[c,e][1,2]thiazine 5,5-dioxide while kept at -30.degree., the
temp.
     raised to 0.degree., the mixt. stirred 1 hr. at 0.degree., H2O added,
the
     mixt. stirred 1 hr. at room temp. and worked up, and the product treated
     with oxalic acid in Et2O to give 6-(.beta.-aminoethyl)-6H-
     dibenzo[c,e][1,2]thiazine 5,5-dioxide oxalate, m. 212-13.degree.
     (decompn.). A soln. of 7 parts NaNO2 in 75 parts H2O was added to a
     stirred mixt. of 24 parts N-(o-aminophenylsulfonyl)-N-(.beta.-
     diethylaminoethyl)aniline, 50 parts AcOH, and 75 parts concd. HCl, the
     mixt. kept at 15-20.degree., stirred 30 min. at 20.degree., dild. with
125
     parts H2O, heated to 95-100.degree., until N formation stopped, cooled,
     alkalized, and extd. with CHCl3, the ext. washed with H2O, dried, and
     filtered, and solvent removed to give 6.beta.-diethylaminoethyl-6H-
     dibenzo[c,e][1,2]thiazine 5,5-dioxide, m. 79-80.degree. (pert. ether, b.
     60-80.degree.). The same compd. was also prepd. from o-(N-
phenylsulfonyl-
     N-.beta.-diethylaminoethylamino)aniline, NaNO2, HCl, and AcOH.
     prepd. was 6-(.beta.-aminoethyl)-6H-dibenzo[c,e][1,2]thiazine 5,5-
dioxide
     oxalate, m. 213.degree. (decompn.). Other compds. prepd. were
     6-(.beta.-diethylaminoethyl)-7-trifluoromethyl-6H-
     dibenzo[c,e][1,2]thiazine 5,5-dioxide, m. 99-100.degree. (petr. ether,
b.
     60-80.degree.), 6-(.beta.-allylaminoethyl)-6H-dibenzo[c,e][1,2]thiazine
     5,5-dioxide hydrochloride, m. 187-8.degree. (MeOH-Et2O),
     6-(.beta.-propylaminoethyl)-6H-dibenzo[c,e][1,2-thiazine 5,5-dioxide
     hydrobromide, m. 255-66.degree. (glacial AcOH), 6.beta.-ethylaminoethyl-
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6н-

dibenzo[c,e][1,2]thiazine 5,5-dioxide benzoate, m. 160-2.degree. (MeOH), and 6.beta.-ethylaminoethyl-6H-dibenzo[c,e][1,2]thiazine 5,5-dioxide maleate, m. 149-51.degree. (MeOH). The prepn. of therapeutic compns. is described.

IT 14758-62-4P 14758-70-4P

RN 14758-62-4 CAPLUS

CN Phthalimide, N-[2-(6H-dibenzo[c,e][1,2]thiazin-6-yl)ethyl]-, S,S-dioxide (8CI) (CA INDEX NAME)

RN 14758-70-4 CAPLUS

CN Succinimide, N-[2-(6H-dibenzo[c,e][1,2]thiazin-6-yl)ethyl]-, S,S-dioxide (8CI) (CA INDEX NAME)

```
1967:65490 CAPLUS
AN
DN
     66:65490
ΤI
     2,1-Benzothiazine 2,2-dioxides
IN
     Loev, Bernard
     Smith Kline and French Laboratories
PA
     U.S., 4 pp.
SO
     CODEN: USXXAM
DТ
     Patent
     English
LΑ
FAN.CNT 1
                                          APPLICATION NO. DATE
     PATENT NO. KIND DATE
                            19670207
     US 3303189
                                           US
                                                            19650311
PΙ
     Sulfostyril (2,1-benzothiazine 2,2-dioxide) compds. were prepd. by the
AΒ
     decompn. of a hydrazone of a 4-oxo-3,4-dihydrosulfostyril (prepd. in
     preceding abstr.) or by the cyclization of an acyl methanesulfonanilide.
     Thus, 85 g. p-tolysulfonylhydrazone of 4-oxo-3,4-dihydrosulfostyril was
     dissolved in 1.7 l. hot EtOH, 39.4 g. NaOMe added, water added to
dissolve
     the mixt., the mixt. refluxed 18 hrs., concd. to a small vol., dild.
with
     water, and made acid, and the solid extd. with boiling water twice to
give
     sulfostyril (I), m. 153-5.degree. (CHCl3). To 0.8 g. of a 55%
dispersion
     of NaH in mineral oil was added 3.0 g. I in 50 ml. dry Me2SO. When
     evolution stopped, 0.041 mole Me2NCH2CH2Cl in benzene was added, the
     heated over steam 18 hrs., the solvent removed in vacuo, water added to
     the residue, and the mixt. extd. with Et2O to give a brown oily base.
The
     oil was dissolved in Et2O and treated with HCl gas to give the HCl salt
of
     N-dimethylaminoethylsulfostyril, m. 237.5-41.degree. (alc.-water). The
     base was treated in Et2O with EtI to give the quaternary ethiodide salt.
     Similarly prepd. was N-3-dimethylaminopropylsulfostyril hydrochloride,
m.
     158-60.degree. (EtOH). The tosylhydrazone of 8-methoxy-4-oxo-3,4-
     dihydrosulfostyril (2 g.) was treated with 1 g. KOEt in aq. EtOH at
reflux
     16 hrs. to give 8-methoxysulfostyril. Similarly prepd. were
     3,6-dimethylsulfostyril, 5-methyl-8-chlorosulfostyril, and
     7-trifluoromethylsulfostyril. Also prepd. were N-acetylsulfostyril,
     4-methylsulfostyril, m. 80-5.degree. (alc.-water), N-methylsulfostyril,
m.
     80-5.degree. (aq. alc.), 6-bromo-N-methylsulfostyril, m. 102-3.degree.,
     N-phenylsulfostyril, m. 156-7.degree., N-.beta.-hydroxyethylsulfostyril,
     N-.beta.-tosyloxyethylsulfostyril, N-butylaminoethylsulfostyril,
     N-piperazinylethylsulfostyril, N-ethylaminoethylsulfostyril,
     N-cyanoethylsulfostyril, N-aminoethylsulfostyril, N-[2-(N-
methylpyrrolidin-
     3-yl)ethyl]-6-trifluoromethylsulfostyril, N-[2-(N-methylpiperidin-2-
     yl)ethyl]sulfostyril, N-methyldihydrosulfostyril, tribromosulfostyril,
m.
     179-80.degree., 6-nitrosulfostyril, and 6-aminosulfostyril.
ΙT
     13618-03-6P
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ANSWER 49 OF 49 CAPLUS COPYRIGHT 2002 ACS

L9

L14 ANSWER 1 OF 22 COPYRIGHT 2002 BEILSTEIN CDS MDLI

Beilstein Reg. No. (BRN): 7240381 Beilstein Molecular Formula (MF): C28 H32 N8 O2 S

Autonom Name (AUN): 2,7,9-trimethyl-3-phenyl-4-<3-(4-pyrimidin-2-yl-

piperazin-1-yl)-propyl>-2,4-dihydro-5-thia-

1,2,4,6-

tetraaza-cyclopenta<a>naphthalene 5,5-dioxide

Beilstein Reference (SO): 6-27 Formula Weight (FW): 544.67

Lawson Number (LN): 32531; 29553; 28000; 3633; 3027

Preparation:

PRE

Start: BRN=7256674 2H-2,7,9-trimethyl-3-phenyl-2,4-dihydropyrazolo<4,3-

c>pyrido<3,2-e>-1,2-thiazine-5,5-dioxide, BRN=7209780

1-chloropropyl-4-pyrimidin-2-yl-piperazine

Reag: NaOEt
Time: 7 hour(s)
Yield: 52.00 %
Solv: ethanol

Heating

Reference(s):

L14 ANSWER 2 OF 22 COPYRIGHT 2002 BEILSTEIN CDS MDLI

Beilstein Reg. No. (BRN): 7240027 Beilstein Molecular Formula (MF): C29 H33 N7 O2 S

Autonom Name (AUN): 2,7,9-trimethyl-3-phenyl-4-<3-(4-pyridin-2-yl-

piperazin-1-yl)-propyl>-2,4-dihydro-5-thia-

1,2,4,6-

tetraaza-cyclopenta<a>naphthalene 5,5-dioxide

Beilstein Reference (SO): 6-27 Formula Weight (FW): 543.69

Lawson Number (LN): 32531; 28000; 27378; 3633; 3027

Preparation:

PRE

Start: BRN=7256674 2H-2,7,9-trimethyl-3-phenyl-2,4-dihydropyrazolo<4,3-

c>pyrido<3,2-e>-1,2-thiazine-5,5-dioxide, BRN=7207969

1-chloropropyl-4-pyridin-2-yl-piperazine

Reag: NaOEt
Time: 7 hour(s)
Yield: 45.00 %
Solv: ethanol

Heating

Reference(s):

L14 ANSWER 3 OF 22 COPYRIGHT 2002 BEILSTEIN CDS MDLI

Beilstein Reg. No. (BRN): 7239665 Beilstein Molecular Formula (MF): C30 H34 N6 O2 S

Autonom Name (AUN): 2,7,9-trimethyl-3-phenyl-4-<3-(4-phenyl-

piperazin-1-

yl)-propyl>-2,4-dihydro-5-thia-1,2,4,6-tetraaza-

cyclopenta<a>naphthalene 5,5-dioxide

Beilstein Reference (SO): 6-27 Formula Weight (FW): 542.70

Lawson Number (LN): 32531; 28000; 14131; 3633; 3027

Preparation:

PRE

Start: BRN=7232235 2H-2,7,9-trimethyl-3-phenyl-4-(3-chloropropyl)-2,4-

dihydropyrazolo<4,3-c>pyrido<3,2-e>-1,2-thiazine-5,5-dioxide,

BRN=132157 1-phenyl-piperazine

Time: 15 hour(s)
Yield: 57.00 %
Solv: xylene

Heating

Reference(s):

 Malinka, Wieslaw; Sieklucka-Dziuba, Maria; Raitar-Cynke, Grazyna; Borowicz, Kinga; Kleinrok, Zdzislaw, Farmaco, 49 <1994> 12, 783-792, LA: EN, CODEN: FRMCE8

PRE

Start: BRN=7256674 2H-2,7,9-trimethyl-3-phenyl-2,4-dihydropyrazolo<4,3-

c>pyrido<3,2-e>-1,2-thiazine-5,5-dioxide, BRN=186532

1-(3-chloro-propyl)-4-phenyl-piperazine

Reag: NaOEt
Time: 7 hour(s)
Yield: 85.00 %
Solv: ethanol

Heating

Reference(s):

L14 ANSWER 4 OF 22 COPYRIGHT 2002 BEILSTEIN CDS MDLI

Beilstein Reg. No. (BRN): 7239640 Beilstein Molecular Formula (MF): C27 H30 N6 O4 S

Autonom Name (AUN): (4-hydroxy-5,7-dimethyl-1,1-dioxo-2-<3-(4-

pyrimidin-

2-yl-piperazin-1-yl)-propyl>-1,2-dihydro-

1.lambda.6-

pyrido<3,2-e><1,2>thiazin-3-yl)-phenyl-methanone

Beilstein Reference (SO): 6-27 Formula Weight (FW): 534.63

Lawson Number (LN): 32175; 29553; 28000; 3027

Preparation:

PRE

Start: BRN=6980884 (4-hydroxy-5,7-dimethyl-1,1-dioxo-1,2-dihydro-1.lambda.6-pyrido<3,2-e><1,2>thiazin-3-yl)-phenyl-methanone,

The social of the second secon

BRN=7209780 1-chloropropyl-4-pyrimidin-2-yl-piperazine

Reag: NaOEt

Time: 15 hour(s)
Yield: 38.00 %
Solv: ethanol

Heating

Reference(s):

 Malinka, Wieslaw; Sieklucka-Dziuba, Maria; Raitar-Cynke, Grazyna; Borowicz, Kinga; Kleinrok, Zdzislaw, Farmaco, 49 <1994> 12, 783-792,

LA: EN, CODEN: FRMCE8

L14 ANSWER 5 OF 22 COPYRIGHT 2002 BEILSTEIN CDS MDLI

Beilstein Reg. No. (BRN): 7239322 Beilstein Molecular Formula (MF): C28 H31 N5 O4 S

Autonom Name (AUN): (4-hydroxy-5,7-dimethyl-1,1-dioxo-2-<3-(4-

pyridin-2-

yl-piperazin-1-yl)-propyl>-1,2-dihydro-

1.lambda.6-

pyrido<3,2-e><1,2>thiazin-3-yl)-phenyl-methanone

Beilstein Reference (SO): 6-27 Formula Weight (FW): 533.64

Lawson Number (LN): 32175; 28000; 27378; 3027

Preparation:

PRE

Start: BRN=6980884 (4-hydroxy-5,7-dimethyl-1,1-dioxo-1,2-dihydro-

1.lambda.6-pyrido<3,2-e><1,2>thiazin-3-yl)-phenyl-methanone,

BRN=7207969 1-chloropropyl-4-pyridin-2-yl-piperazine

Reag: NaOEt

Time: 15 hour(s)
Yield: 48.00 %
Solv: ethanol

Heating

Reference(s):

L14 ANSWER 6 OF 22 COPYRIGHT 2002 BEILSTEIN CDS MDLI

Beilstein Reg. No. (BRN): 7238879 Beilstein Molecular Formula (MF): C29 H32 N4 O4 S

Autonom Name (AUN): (4-hydroxy-5,7-dimethyl-1,1-dioxo-2-<3-(4-phenyl-

piperazin-1-yl)-propyl>-1,2-dihydro-1.lambda.6pyrido<3,2-e><1,2>thiazin-3-yl)-phenyl-methanone

Beilstein Reference (SO): 6-27 Formula Weight (FW): 532.66

Lawson Number (LN): 32175; 28000; 14131; 3027

Preparation:

PRÉ

Start: BRN=6980884 (4-hydroxy-5,7-dimethyl-1,1-dioxo-1,2-dihydro-

1.lambda.6-pyrido<3,2-e><1,2>thiazin-3-yl)-phenyl-methanone,

BRN=186532 1-(3-chloro-propyl)-4-phenyl-piperazine

Reag: NaOEt

Time: 15 hour(s)
Yield: 54.00 %
Solv: ethanol

Heating

Reference(s):

L14 ANSWER 7 OF 22 COPYRIGHT 2002 BEILSTEIN CDS MDLI

Beilstein Reg. No. (BRN): 7236554 Beilstein Molecular Formula (MF): C23 H30 N8 O2 S

Autonom Name (AUN): 2,3,7,9-tetramethyl-4-<3-(4-pyrimidin-2-yl-

piperazin-1-yl)-propyl>-2,4-dihydro-5-thia-

1,2,4,6-

tetraaza-cyclopenta<a>naphthalene 5,5-dioxide

Beilstein Reference (SO): 6-27 Formula Weight (FW): 482.60

Lawson Number (LN): 32535; 29553; 28000; 3633; 3027

Preparation:

PRE

Start: BRN=7253565 2H-2,3,7,9-tetramethyl-2,4-dihydropyrazolo<4,3-dihydropyrazolo<4,3-dihydropyrazolo<4,3-dihydropyrazolo<4,3-dihydropyrazolo<4,3-dihydropyrazolo<4,3-dihydropyrazolo<4,3-dihydropyrazolo<4,3-dihydropyrazolo<4,3-dihydropyrazolo<4,3-dihydropyrazolo<4,3-dihydropyrazolo<4,3-dihydropyrazolo<4,3-dihydropyrazolo<4,3-dihydropyrazolo<4,3-dihydropyrazolo<4,3-dihydropyrazolo<4,3-dihydropyrazolo<4,3-dihydropyrazolo<4,3-dihydropyrazolo<4,3-dihydropyrazolo<4,3-dihydropyrazolo<4,3-dihydropyrazolo<4,3-dihydropyrazolo<4,3-dihydropyrazolo<4,3-dihydropyrazolo<4,3-dihydropyrazolo<4,3-dihydropyrazolo<4,3-dihydropyrazolo<4,3-dihydropyrazolo<4,3-dihydropyrazolo<4,3-dihydropyrazolo<4,3-dihydropyrazolo<4,3-dihydropyrazolo<4,3-dihydropyrazolo<4,3-dihydropyrazolo<4,3-dihydropyrazolo<4,3-dihydropyrazolo<4,3-dihydropyrazolo<4,3-dihydropyrazolo<4,3-dihydropyrazolo<4,3-dihydropyrazolo<4,3-dihydropyrazolo<4,3-dihydropyrazolo<4,3-dihydropyrazolo<4,3-dihydropyrazolo<4,3-dihydropyrazolo<4,3-dihydropyrazolo<4,3-dihydropyrazolo<4,3-dihydropyrazolo<4,3-dihydropyrazolo<4,3-dihydropyrazolo<4,3-dihydropyrazolo<4,3-dihydropyrazolo<4,3-dihydropyrazolo<4,3-dihydropyrazolo<4,3-dihydropyrazolo<4,3-dihydropyrazolo<4,3-dihydropyrazolo<4,3-dihydropyrazolo<4,3-dihydropyrazolo<4,3-dihydropyrazolo<4,3-dihydropyrazolo<4,3-dihydropyrazolo<4,3-dihydropyrazolo<4,3-dihydropyrazolo<4,3-dihydropyrazolo<4,3-dihydropyrazolo<4,3-dihydropyrazolo<4,3-dihydropyrazolo<4,3-dihydropyrazolo<4,3-dihydropyrazolo<4,3-dihydropyrazolo<4,3-dihydropyrazolo<4,3-dihydropyrazolo<4,3-dihydropyrazolo<4,3-dihydropyrazolo<4,3-dihydropyrazolo<4,3-dihydropyrazolo<4,3-dihydropyrazolo<4,3-dihydropyrazolo<4,3-dihydropyrazolo<4,3-dihydropyrazolo<4,3-dihydropyrazolo<4,3-dihydropyrazolo<4,3-dihydropyrazolo<4,3-dihydropyrazolo<4,3-dihydropyrazolo<4,3-dihydropyrazolo<4,3-dihydropyrazolo<4,3-dihydropyrazolo<4,3-dihydropyrazolo<4,3-dihydropyrazolo<4,3-dihydropyrazolo<4,3-dihydropyrazolo<4,3-dihydropyrazolo<4,3-dihydropyrazolo<4,3-dihydropyrazolo<4,3-dihydropyrazolo<4,3-dihydropyrazolo<4,

c>pyrido<3,2-e>-1,2-thiazine-5,5-dioxide, BRN=7209780

1-chloropropyl-4-pyrimidin-2-yl-piperazine

Reag: NaOEt
Time: 7 hour(s)
Yield: 65.00 %
Solv: ethanol

Heating

Reference(s):

L14 ANSWER 8 OF 22 COPYRIGHT 2002 BEILSTEIN CDS MDLI

Beilstein Reg. No. (BRN): 7236090 Beilstein Molecular Formula (MF): C24 H31 N7 O2 S

Autonom Name (AUN): 2,3,7,9-tetramethyl-4-<3-(4-pyridin-2-yl-

piperazin-

1-yl)-propyl>-2,4-dihydro-5-thia-1,2,4,6-

tetraaza-

cyclopenta<a>naphthalene 5,5-dioxide

Beilstein Reference (SO): 6-27 Formula Weight (FW): 481.61

Lawson Number (LN): 32535; 28000; 27378; 3633; 3027

Preparation:

PRE

Start: BRN=7253565 2H-2,3,7,9-tetramethyl-2,4-dihydropyrazolo<4,3-

c>pyrido<3,2-e>-1,2-thiazine-5,5-dioxide, BRN=7207969

1-chloropropyl-4-pyridin-2-yl-piperazine

Reag: NaOEt
Time: 7 hour(s)
Yield: 65.00 %
Solv: ethanol

Heating

Reference(s):

1. Malinka, Wieslaw; Sieklucka-Dziuba, Maria; Raitar-Cynke, Grazyna; Borowicz, Kinga; Kleinrok, Zdzislaw, Farmaco, 49 <1994> 12, 783-792,

LA: EN, CODEN: FRMCE8

L14 ANSWER 9 OF 22 COPYRIGHT 2002 BEILSTEIN CDS MDLI

Beilstein Reg. No. (BRN): 7235971 Beilstein Molecular Formula (MF): C25 H32 N6 O2 S

Autonom Name (AUN): 1,3,7,9-tetramethyl-4-<3-(4-phenyl-piperazin-1-

yl)-

propyl>-1,4-dihydro-5-thia-1,2,4,6-tetraaza-

cyclopenta<a>naphthalene 5,5-dioxide

Beilstein Reference (SO): 6-27 Formula Weight (FW): 480.63

Lawson Number (LN): 32535; 28000; 14131; 3633; 3027

Preparation:

PRE

Start: BRN=7235030 2H-3-acetyl-4-hydroxy-5,7-dimethyl-2-<3-(4-phenyl-1-

piperazinyl)propyl>-pyrido<3,2-e>-1,2-thiazine-1,1-dioxide,

BRN=635645 methylhydrazine

Time: 3 hour(s)
Solv: ethanol

Heating

ByProd: BRN=7235395 2H-2,3,7,9-tetramethyl-4-<3-(4-phenyl-1-

piperazinyl)propyl>-2,4-dihydropyrazolo<4,3-c>pyrido<3,2-e>-1,2-

thiazine-5,5-dioxide \8 percent

Reference(s):

 Malinka, Wieslaw; Sieklucka-Dziuba, Maria; Raitar-Cynke, Grazyna; Borowicz, Kinga; Kleinrok, Zdzislaw, Farmaco, 49 <1994> 12, 783-792, LA: EN, CODEN: FRMCE8

Note(s):

2. Yield: 0.5 g

L14 ANSWER 10 OF 22 COPYRIGHT 2002 BEILSTEIN CDS MDLI

Beilstein Reg. No. (BRN): 7235395 Beilstein Molecular Formula (MF): C25 H32 N6 O2 S

Autonom Name (AUN): 2,3,7,9-tetramethyl-4-<3-(4-phenyl-piperazin-1-

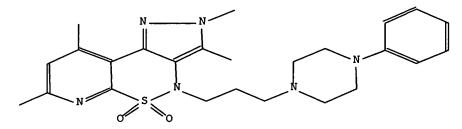
yl)-

propyl>-2,4-dihydro-5-thia-1,2,4,6-tetraaza-

cyclopenta<a>naphthalene 5,5-dioxide

Beilstein Reference (SO): 6-27 Formula Weight (FW): 480.63

Lawson Number (LN): 32535; 28000; 14131; 3633; 3027



Preparation:

PRE

Start: BRN=7224939 2H-2,3,7,9-tetramethyl-4-(3-chloropropyl)-2,4-

dihydropyrazolo<4,3-c>pyrido<3,2-e>-1,2-thiazine-5,5-dioxide,

BRN=132157 1-phenyl-piperazine

Time: 15 hour(s)
Yield: 55.00 %
Solv: xylene

Heating

Reference(s):

 Malinka, Wieslaw; Sieklucka-Dziuba, Maria; Raitar-Cynke, Grazyna; Borowicz, Kinga; Kleinrok, Zdzislaw, Farmaco, 49 <1994> 12, 783-792, LA: EN, CODEN: FRMCE8

PRE

Start: BRN=7235030 2H-3-acetyl-4-hydroxy-5,7-dimethyl-2-<3-(4-phenyl-1-

piperazinyl)propyl>-pyrido<3,2-e>-1,2-thiazine-1,1-dioxide,

BRN=635645 methylhydrazine

Time: 3 hour(s)
Yield: 8.00 %
Solv: ethanol

Heating

ByProd: BRN=7235971 1H-1,3,7,9-tetramethyl-4-<3-(4-phenyl-1-

 $\verb|piperazinyl|| propyl>-1, 4-dihydropyrazolo<4, 3-c>pyrido<3, 2-e>-1, 2-dihydropyrazolo<4, 3-c>pyrido<3, 2-e>-1, 2-e>-1,$

thiazine-5,5-dioxide \0.5 g

L14 ANSWER 11 OF 22 COPYRIGHT 2002 BEILSTEIN CDS MDLI

Beilstein Reg. No. (BRN): 7235030 Beilstein Molecular Formula (MF): C24 H30 N4 O4 S

Autonom Name (AUN): 1-(4-hydroxy-5,7-dimethyl-1,1-dioxo-2-<3-(4-hydroxy-5,7-dimethyl-1,1-dioxo-2-<3-(4-hydroxy-5,7-dimethyl-1,1-dioxo-2-<3-(4-hydroxy-5,7-dimethyl-1,1-dioxo-2-<3-(4-hydroxy-5,7-dimethyl-1,1-dioxo-2-<3-(4-hydroxy-5,7-dimethyl-1,1-dioxo-2-<3-(4-hydroxy-5,7-dimethyl-1,1-dioxo-2-<3-(4-hydroxy-5,7-dimethyl-1,1-dioxo-2-<3-(4-hydroxy-5,7-dimethyl-1,1-dioxo-2--<3-(4-hydroxy-5,7-dimethyl-1,1-dioxo-2--<3-(4-hydroxy-5,7-dimethyl-1,1-dioxo-2--<3-(4-hydroxy-5,7-dimethyl-1,1-dioxo-2---)

phenyl-

piperazin-1-yl)-propyl>-1,2-dihydro-1.lambda.6-

pyrido<3,2-e><1,2>thiazin-3-yl)-ethanone

Beilstein Reference (SO): 6-27 Formula Weight (FW): 470.59

Lawson Number (LN): 32173; 28000; 14131; 3027

Preparation:

PRE

Start: BRN=6976045 1-(4-hydroxy-5,7-dimethyl-1,1-dioxo-1,2-dihydro-

1.lambda.6-pyrido<3,2-e><1,2>thiazin-3-yl)-ethanone, BRN=186532

1-(3-chloro-propyl)-4-phenyl-piperazine

Reag: NaOEt
Time: 15 hour(s)
Yield: 56.00 %
Solv: ethanol

Heating

Reference(s):

L14 ANSWER 12 OF 22 COPYRIGHT 2002 BEILSTEIN CDS MDLI

Beilstein Reg. No. (BRN): 6995465 Beilstein

Molecular Formula (MF): C24 H30 N4 O4 S . 2 Cl H

Lin. Struct. Formula (LSF): C24H30N4O4S*2HCl

Synonym (SY):

2H-3-benzoyl-4-hydroxy-5,7-dimethyl-2-<3-(1-

methyl-

4-piperazinyl)propyl>pyrido<3,2-e>-1,2-thiazine-

1,1-

dioxide dihydrochloride

Beilstein Reference (SO): 6-27

CM 2

CBRN 1098214 CMF Cl H

Preparation:

PRE

Start: BRN=6980884 2H-3-benzoyl-4-hydroxy-5,7-dimethylpyrido<3,2-e>-

1,2-

thiazine-1,1-dioxide, BRN=106074 1-(3-chloro-propyl)-4-methyl-

piperazine

Reag: 1.) sodium; 2.) hydrogen chloride

Time: 5 hour(s)
Yield: 40.00 %
Solv: ethanol

Heating

Reference(s):

1. Zawisza, T.; Malinka, W., Farmaco Ed.Sci., 41 <1986> 10, 819-826, LA: EN, CODEN: FRPSAX

L14 ANSWER 13 OF 22 COPYRIGHT 2002 BEILSTEIN CDS MDLI

Beilstein Reg. No. (BRN): 6994407 Beilstein

Molecular Formula (MF): C19 H28 N4 O4 S . 2 Cl H

Lin. Struct. Formula (LSF): C19H28N4O4S*2HCl

Synonym (SY):

2H-3-acetyl-4-hydroxy-5,7-dimethyl-2-<3-(1-

methyl-4-

piperazinyl)propyl>pyrido<3,2-e>-1,2-thiazine-

1,1-

dioxide dihydrochloride

Beilstein Reference (SO): 6-27

CM 2

CBRN 1098214 CMF Cl H

Preparation:

PRE

Start: BRN=6976045 2H-3-acetyl-4-hydroxy-5,7-dimethylpyrido<3,2-e>-1,2-

thiazine-1,1-dioxide, BRN=106074 1-(3-chloro-propyl)-4-methyl-

piperazine

Reag: 1.) sodium; 2.) hydrogen chloride

Time: 5 hour(s)
Yield: 60.00 %
Solv: ethanol

Heating

Reference(s):

1. Zawisza, T.; Malinka, W., Farmaco Ed.Sci., 41 <1986> 10, 819-826, LA:

EN, CODEN: FRPSAX

L14 ANSWER 14 OF 22 COPYRIGHT 2002 BEILSTEIN CDS MDLI

Beilstein Reg. No. (BRN): 6985897 Beilstein Molecular Formula (MF): C16 H22 N4 O4 S

Autonom Name (AUN): (4-hydroxy-2,5,7-trimethyl-1,1-dioxo-1,2-dihydro-

1.lambda.6-thia-2,8-diaza-naphthalen-3-yl)-(4-

methyl-piperazin-1-yl)-methanone

Beilstein Reference (SO): 6-27 Formula Weight (FW): 366.43

Lawson Number (LN): 32204; 28000; 2817

Preparation:

PRE

Start: BRN=6980776 2H-3-ethoxycarbonyl-4-hydroxy-2,5,7-

trimethylpyrido<3,2-e>-1,2-thiazine-1,1-dioxide, BRN=102724

1-methyl-piperazine

Yield: 33.00 % Solv: xylene

Heating

Detail: Soxhlet apparatus with type 4A molecular sieves

Reference(s):

1. Zawisza, T.; Malinka, W., Farmaco Ed.Sci., 41 <1986> 11, 892-898, LA: EN, CODEN: FRPSAX

L14 ANSWER 15 OF 22 COPYRIGHT 2002 BEILSTEIN CDS MDLI

Beilstein Reg. No. (BRN): 6245731 Beilstein Molecular Formula (MF): C23 H30 N4 O2 S

Synonym (SY): 4,6-dimethyl-2-<3'-(N'-methylpiperazinyl)propyl>-

8-

phenyl-2H-pyrido-<2,3-c>-1,2-thiazine 1,1-dioxide

Autonom Name (AUN): 5,7-dimethyl-1-<3-(4-methyl-piperazin-1-yl)-

propyl>-

3-phenyl-1H-pyrido<2,3-c><1,2>thiazine 2,2-

dioxide

Beilstein Reference (SO): 6-27 Formula Weight (FW): 426.58

Lawson Number (LN): 32020; 28000; 3027; 2817

* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT *

Preparation:

PRE

Start: BRN=6216734 4,6-dimethyl-8-phenyl-2H-pyrido-<2,3-c>-1,2-thiazine

1,1-dioxide, BRN=106074 1-(3-chloro-propyl)-4-methyl-piperazine

Reag: Na/ethanol Time: 18 hour(s) Yield: 40.00 % Solv: benzene

Heating

ByProd: BRN=6242893 4,6-dimethyl-3-<3'-(N'-methylpiperazinyl)propyl>-8-

phenyl-3H-pyrido-<2,3-c>-1,2-thiazine 1,1-dioxide \34 percent of

Input

Reference(s):

1. ZAWISZA, Tadeusz; MILIAN, Anna; JAKOBIEC, Tadeusz, Pol.J.Chem., 54 <1980> 7/8, 1413-1424, LA: EN, CODEN: PJCHDQ

L14 ANSWER 16 OF 22 COPYRIGHT 2002 BEILSTEIN CDS MDLI

Beilstein Reg. No. (BRN): 6183454 Beilstein Molecular Formula (MF): C28 H28 F N3 O2 S

Autonom Name (AUN): 10-(2-4-(5-fluoro-1H-indol-3-ylmethyl)-

piperidin-1-

yl>-ethyl)-10H-9-thia-10-aza-phenanthrene

9,9-dioxide

Beilstein Reference (SO): 6-27 Formula Weight (FW): 489.61

Lawson Number (LN): 30935; 28157; 3018

Preparation:

PRE

Start: BRN=6149735 6-(2-chloroethyl)-6H-dibenz<ce>-1,2-thiazine

5,5-dioxide, BRN=5544309 5-fluoro-3-(4-piperidinylmethyl)indole

Reag: NaHCO3
Time: 5 hour(s)
Yield: 67.00 %

Solv: dimethylformamide, tetrahydrofuran

Heating

Reference(s):

 Malleron, Jean-Luc; Gueremy, Claude; Mignani, Serge; Peyronel, Jean-Francois; Truchon, Alain; et al., J.Med.Chem., 36 <1993> 9, 1194-1202, LA: EN, CODEN: JMCMAR

L14 ANSWER 17 OF 22 COPYRIGHT 2002 BEILSTEIN CDS MDLI

Beilstein Reg. No. (BRN): 6172271 Beilstein

Molecular Formula (MF): C28 H28 F N3 O2 S . C2 H2 O4

Synonym (SY): 6-<2-<4-((5-fluoro-1H-indol-3-yl)methyl)-1-

piperidinyl>ethyl>-6H-dibenz<ce>-1,2-thiazine

5,5-dioxide oxalate

Beilstein Reference (SO): 6-27

Component Data:

Component	Component	ı	Formula	ł	Lawson	Number	
Reg. No.	Molec. Formula	-	Weight	F			
(CBRN)	• •	•	(,	•	(LN)		
•		•		•		======= 28157	3018
•	C2 H2 O4	1	90.04	•	•	20137,	3010

CM 1

CBRN 6183454 CMF C28 H28 F N3 O2 S

CM 2

CBRN 385686 CMF C2 H2 O4

L14 ANSWER 18 OF 22 COPYRIGHT 2002 BEILSTEIN CDS MDLI

Beilstein Reg. No. (BRN): 5892992 Beilstein Molecular Formula (MF): C23 H25 N3 O5 S

Autonom Name (AUN): 2-(3-benzoyl-4-hydroxy-5,7-dimethyl-1,1-dioxo-1H-

1.lambda.6-thia-2,8-diaza-naphthalen-2-yl)-1-

piperidin-1-yl-ethanonen

Beilstein Reference (SO): 6-27 Formula Weight (FW): 455.53

Lawson Number (LN): 32175; 24081; 3379

Preparation:

PRE

Start: BRN=5888355 (3-benzoyl-4-hydroxy-5,7-dimethyl-1,1-dioxo-1H-

1.lambda.6-thia-2,8-diaza-naphthalen-2-yl)-acetyl chloride,

BRN=102438 piperidine

Time: 24 hour(s)

Solv: CHCl3

Ambient Temperature

Reference(s):

1. MALINKA, W.; DEREN, A., Pol.J.Chem., 66 <1992> 12, 1953-1960, LA: EN,

CODEN: PJCHDQ

Note(s):

2. Yield given

L14 ANSWER 19 OF 22 COPYRIGHT 2002 BEILSTEIN CDS MDLI

Beilstein Reg. No. (BRN): 5889002 Beilstein Molecular Formula (MF): C18 H23 N3 O5 S

Autonom Name (AUN): 2-(3-acetyl-4-hydroxy-5,7-dimethyl-1,1-dioxo-1H-

1.lambda.6-thia-2,8-diaza-naphthalen-2-yl)-1-

piperidin-1-yl-ethanoney

Beilstein Reference (SO): 6-27 Formula Weight (FW): 393.46

Lawson Number (LN): 32173; 24081; 3379

Preparation:

PRE

Start: BRN=5884394 (3-acetyl-4-hydroxy-5,7-dimethyl-1,1-dioxo-1H-

1.lambda.6-thia-2,8-diaza-naphthalen-2-yl)-acetyl chloride,

BRN=102438 piperidine

Time: 24 hour(s)
Solv: CHCl3
Ambient Temperature

Reference(s):

1. MALINKA, W.; DEREN, A., Pol.J.Chem., 66 <1992> 12, 1953-1960, LA: EN,

CODEN: PJCHDQ

Note(s):

2. Yield given

L14 ANSWER 20 OF 22 COPYRIGHT 2002 BEILSTEIN CDS MDLI

Beilstein Reg. No. (BRN): 1178633 Beilstein Molecular Formula (MF): C22 H25 Cl N2 O2 S

Chemical Name (CN): 6-chloro-4-methyl-3-phenyl-1-(2-piperidin-1-yl-

ethyl)-1H-benzo<c><1,2>thiazine 2,2-dioxide

Autonom Name (AUN): 6-chloro-4-methyl-3-phenyl-1-(2-piperidin-1-yl-

ethyl)-1H-benzo<c><1,2>thiazine 2,2-dioxide

Beilstein Reference (SO): 5-27 Formula Weight (FW): 416.96

Lawson Number (LN): 30948; 24081; 3018

* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT *

Preparation:

PRE

Reference(s):

 Sianesi; Redaelli, Anal.Chem., 57 <1967>, 1426,1428,1429,1430, CODEN: ANCHAM

L14 ANSWER 21 OF 22 COPYRIGHT 2002 BEILSTEIN CDS MDLI

Beilstein Reg. No. (BRN): 1173737 Beilstein Molecular Formula (MF): C22 H26 N2 O2 S

Chemical Name (CN): 4-methyl-3-phenyl-1-(2-piperidin-1-yl-ethyl)-1H-

benzo<c><1,2>thiazine 2,2-dioxide

Autonom Name (AUN): 4-methyl-3-phenyl-1-(2-piperidin-1-yl-ethyl)-1H-

benzo<c><1,2>thiazine 2,2-dioxide

Beilstein Reference (SO): 5-27 Formula Weight (FW): 382.52

Lawson Number (LN): 30947; 24081; 3018

* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT *

Preparation:

PRE

Reference(s):

1. Sianesi; Redaelli, Anal.Chem., 57 <1967>, 1426,1428,1429,1430, CODEN:

L14 ANSWER 22 OF 22 COPYRIGHT 2002 BEILSTEIN CDS MDLI

Beilstein Reg. No. (BRN): 691238 Beilstein Molecular Formula (MF): C14 H18 N2 O4 S

Chemical Name (CN): 2-(2-morpholin-4-yl-ethyl)-1,1-dioxo-1,4-dihydro-

2H-

1.lambda.6-benzo<e><1,2>thiazin-3-one

Autonom Name (AUN): 2-(2-morpholin-4-yl-ethyl)-1,1-dioxo-1,4-dihydro-

2H-

1.lambda.6-benzo<e><1,2>thiazin-3-oneh

Beilstein Reference (SO): 5-27 Formula Weight (FW): 310.37

31166; 30824; 3018 Lawson Number (LN):

Preparation:

PRE

Start: BRN=745644 C8H7NO3S, BRN=3684083 4-(2-chloro-ethyl)-morpholine;

hydrochloride

Reag: K2CO3, Cu Time: 12 hour(s) Solv: toluene

Heating

Reference(s):

1. Sianesi, E. et al., J.Med.Chem., 16 <1973>, 1133-1137, LA: EN, CODEN: **JMCMAR**

```
136:37528 MARPAT
AN
ΤI
     Preparation of indole derivatives for the treatment of CNS disorders
     Bang-Andersen, Benny; Felding, Jakob; Kehler, Jan; Andersen, Kim
IN
     H. Lundbeck A/S, Den.
PA
     PCT Int. Appl., 59 pp.
SO
     CODEN: PIXXD2
DT
     Patent
     English
LΑ
FAN.CNT 1
                      KIND DATE
                                           APPLICATION NO. DATE
     PATENT NO.
                            20011220
                                           WO 2001-DK406
                                                            20010613
PΙ
     WO 2001096328
                      A1
            AE, AG, AL, AM, AT, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH,
             CN, CO, CR, CU, CZ, CZ, DE, DE, DK, DK, DM, DZ, EE, EE, ES, FI,
             FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP,
             KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX,
             MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SK, SL, TJ, TM,
             TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ,
             MD, RU, TJ, TM
         RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY,
             DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF,
             BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG
                      20000614
PRAI DK 2000-919
     US 2000-212445
                      20000616
GΙ
* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT *
     The title compds. [I; one of Y1, Y2 = N, which is bound to Y4, and the
AB
     other Y1 and Y2 = CO, CS, SO, etc; Y4 = CH2, CO, CS, etc.; Y3 = ZCH2,
     CH2Z, CH2CH2; Z = 0, S; W = a bond, 0, S, etc.; n = 0-5; m = 0-5; m + n
     1-10; X = C, CH, N; R1-R9 = H, halo, CN, etc.; R10 = H, alkyl, aryl,
etc.]
     which are dopamine and serotonin receptor ligands, and are useful in the
     treatment of certain psychiatric and neurol. disorders, i.e.
     schizophrenia, other psychoses, anxiety disorders, depression, migraine,
     cognitive disorders, ADHD and sleep improvement, were prepd. and
     formulated. Thus, reacting 5-fluoro-3-(piperidin-4-yl)-1H-indole with
     1-(2-chloroethyl)-3,4-dihydroquinolin-2-(1H)-one in the presence of Et3N
     in DMF and butanone afforded II which showed 92% inhibition of the
binding
     of [3H]YM-09151-2 to human dopamine D4 receptors at 50 nM.
```

ANSWER 1 OF 18 MARPAT COPYRIGHT 2002 ACS

MSTR 1

L20

Ģ1—*Ģ*7—*Ģ*9—3*G*16

G7 = 30-1 27-3

G10 = (1-6) CH2 G14 = CH2CH2 G15 = SO2 G16 = 48

$$48 G_{15} G_{2} G_{2}$$

MPL: claim 1

NTE: or pharmaceutically acceptable acid addition salts

NTE: substitution is restricted

RE.CNT 9 THERE ARE 9 CITED REFERENCES AVAILABLE FOR THIS RECORD

ALL CITATIONS AVAILABLE IN THE RE FORMAT

```
ANSWER 2 OF 18 MARPAT COPYRIGHT 2002 ACS
     135:288798 MARPAT
AN
     Bicyclic sulfonyl amino inhibitors of factor Xa
ΤI
     Li, Wenhao; Marlowe, Charles K.; Scarborough, Robert M.
IN
     Cor Therapeutics, Inc., USA
PA
     PCT Int. Appl., 76 pp.
SO
     CODEN: PIXXD2
     Patent
DT
     English
LΑ
FAN.CNT 1
     PATENT NO.
                      KIND DATE
                                           APPLICATION NO. DATE
                                           WO 2001-US9375
                                                            20010326
     WO 2001072725
                     A1
                            20011004
PΙ
         W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN,
             CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR,
             HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT,
             LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU,
             SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN,
             YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM
         RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY,
             DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF,
             BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG
PRAI US 2000-191715
                     20000324
GΙ
* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT *
     Heterobicyclics I and II (A = N \text{ substituted with } H, OH, alkyl, alkenyl,
AB
     alkynyl, cycloalkyl, carbocyclic aryl, heterocyclic ring with N, O, S; n
     0-3; Z = alkyl, alkenyl, alkynyl, cycloalkyl, carbocyclic aryl,
     heterocyclic ring with N, O, S; D = link of O, S, SO2, N, OC(=O), CO2,
etc
     groups; R = H, halogen, CN, NO2, OC(=0), or (un)substituted carbon or
     nitrogen group, etc; R1 and R2 are independently H, S, OC(=0), CO2,
     (unsubstituted)-chain or -ring; X = N or (un)substituted C; E and J = O,
N
     linked to (unsubstituted)-chain or heterocyclic ring system; G = H, CN,
0,
     C(=N)N where the N is bonded to H or carbon group substituted) and their
     pharmaceutically acceptable isomers, salts, hydrates, solvates and
prodrug
     derivs. having activity against mammalian factor Xa were prepd.
     Pharmaceutical compns. contg. I and II have an IC50 of preferably >
     10.0.mu.M in the thrombin assay and more preferred compds. have an IC50
of
     > 100.0.mu.M in the thrombin assay. Compns. and derivs. of I and II are
    useful in vitro or in vivo for preventing or treating conditions in
    mammals characterized by undesired thrombosis. Non-bicyclic sulfonyl
    amino compds. were also prepd. and III had an IC50nM of 133,000 for
     thrombin and the structure activity relationship of these aniline based
    diamidine factor Xa inhibitors is documented.
```

$$G18 = 377$$

G35 = 178-1 174-3

$$\begin{array}{c} G39 \\ G39 \\ G39 \\ G39 \\ G39 \\ G39 \\ \end{array}$$

G36 = CH (SO)

G38 = 176-177 175-182

G43 = (1-2) CH2

G49 = morpholino

MPL: claim 1

NTE: additional ring formation also claimed

NTE: and all pharmaceutically acceptable salts, hydrates, solvates and

prodrugs

NTE: substitution is restricted

STE: and all pharmaceutically acceptable isomers

RE.CNT 4 THERE ARE 4 CITED REFERENCES AVAILABLE FOR THIS RECORD ALL CITATIONS AVAILABLE IN THE RE FORMAT

```
ANSWER 3 OF 18 MARPAT COPYRIGHT 2002 ACS
L20
     135:46112 MARPAT
AN
     Synthesis and use of substituted phenanthridinones as inhibitors of
ΤI
     poly-ADP ribose synthase (PARS)
     Szabo, Csaba; Jagtap, Prakash; Southan, Garry; Salzman, Andrew L.
IN
     Inotek Corporation, USA
PA
SO
     PCT Int. Appl., 57 pp.
     CODEN: PIXXD2
DT
     Patent
LΑ
     English
FAN.CNT 1
     PATENT NO.
                      KIND
                            DATE
                                           APPLICATION NO.
PΙ
     WO 2001042219
                       A2
                            20010614
                                           WO 2000-US42656
                                                            20001207
     WO 2001042219
                       A3
                            20011213
           AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN,
             CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR,
             HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT,
             LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU,
             SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN,
             YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM
         RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY,
             DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF,
             BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG
                            20010821
                                          US 1999-454867
     US 6277990
                       В1
PRAI US 1999-454867
                      19991207
     US 2000-587181
                      20000602
    US 2000-602539
                      20000622
```

$$R^{8}$$
 R^{7}
 R^{8}
 R^{9}
 R^{10}
 R^{10

20000629

US 2000-606587

GI

AB Compds. I, their prepn. and use are claimed [wherein; X = CO, CS, SO2, C:NH (or derivs.) or CCl; Q = NHCO, O, CO, OCO2, OCO, etc.; R1-10 = H or alkyl; Y1-2 = H, halo, alkyl(halo), OH, carbocyclic, aryl, etc.; n = 0-10;

Z1-2 = H, alkylhalo, alk(en/yn)yl, etc. or taken together form a fused ring wherein said ring has 4-8 ring members]. Several examples are given.

For instance, II is prepd. from acylation of 2-amino-6(5H)-phenanthridinone with chloroacetyl chloride followed by substitution with

di-Me amine. Compds. I are inhibitors of PARS. Compds. I showed efficacy

in inflammation in-vitro; inhibition of TNF-.alpha. (II: EC50 =
5.4.mu.M),

MIP-1.alpha., MIP-2 and nitric oxide prodn. when exposed to LPS and in-vivo; LPS-induced mortality reduced from 92% to 50% in mice at 20 mg/kg

(II, pretreatment). In an oxidant-stimulated thymocyte assay (in-vitro reperfusion model) II was found to provide cytoprotection (70%) at 10nM to

1.mu.M. Using a MCAO model (2 h occlusion, 24 h reperfusion, rat), administration of II (10 mg/kg i.v. injected 5 min prior to reperfusion) was found to give complete protection against mortality (control group

mortality). Compds. of the invention were also found to restore vascular $\ensuremath{\mathsf{Vascular}}$

function in diabetic mice without altering systemic glucose, glycated Hb or pancreatic insulin levels. Claimed uses of the compds. include treatment of symptoms of multiple sclerosis, prevention/treatment of local/systemic inflammation, prevention/treatment of conditions related

cardiovascular complications of diabetes and enhancing the function of a transplanted organ.

MSTR 2A

G15-G16

73%

to

G1 = SO2G4 = C(0)

G9 = piperidino

G15 = 183

MPL: claim 17

L20 ANSWER 4 OF 18 MARPAT COPYRIGHT 2002 ACS

AN 134:222727 MARPAT

TI Preparation of tetrahydroquinazoline-2,4-diones for inhibiting serotonin reuptake or 5-HT2A serotonin receptor binding

IN Butler, Todd William; Fliri, Anton Franz Josef; Gallaschun, Randall
James;

Jones, Brian Patrick; Ragan, John Anthony

PA Pfizer Products Inc., USA

SO Eur. Pat. Appl., 35 pp.

CODEN: EPXXDW

DT Patent

LA English

FAN.CNT 1

R3

PATENT NO. KIND DATE APPLICATION NO. ______ ____ EP 1083178 EP 2000-307433 20000830 A1 20010314 PΙ R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO JP 2001114778 A2 20010424 JP 2000-261115 20000830 PRAI US 1999-151725 19990831 GI

AB The title compds. [I; A = (CH2)n (wherein n = 0-2); U = CH2, NH, NR3; R1,

R2 = H, alkyl, Cl, etc.; or R1 and R2, together with the atoms to which they are attached, form 5-6 membered carbocyclic or heterocyclic ring;

= H, alkyl, C(O)alkyl; R4, R5 = H, alkyl, Cl, etc.; V = CH, CR3, N; W =
CH2, CO, SO2; X = C, N; Y = CH, CR1, CR2, N] and their pharmaceutically
acceptable salts, useful in treating diseases, conditions or disorders
of

the central nervous system, were prepd. Thus, treatment of Me 2-amino-5-methylbenzoate with triphosgene in the presence of Et3N in CH2Cl2 followed by addn. of 3-[4-(4-chlorophenyl)-3,6-dihydro-2H-pyridin-1-

yl]propylamine (prepn. given) afforded 79% II. The exemplified compds.

showed more than 50% inhibition at <50~nM in the serotonin reuptake assay

and binding assays for 5-Ht2A serotonin receptor.

MSTR 1

$$G1 = 14-4 17-6$$

$$G2 = 107$$

G5 = CH2

MPL: claim 1

NTE: or pharmaceutically acceptable salts

RE.CNT 5 THERE ARE 5 CITED REFERENCES AVAILABLE FOR THIS RECORD ALL CITATIONS AVAILABLE IN THE RE FORMAT

```
ANSWER 5 OF 18 MARPAT COPYRIGHT 2002 ACS
L20
     132:308329 MARPAT
AN
     Preparation of tricyclic heterocycles as potassium channel openers
TI
     Carroll, William A.; Agrios, Konstantinos A.; Basha, Fatima Z.; Chen,
IN
     Yiyuan; Kort, Michael E.; Kym, Philip R.; Tang, Rui; Turner, Sean C.;
Yi,
PA
     Abbott Laboratories, USA
SO
     PCT Int. Appl., 181 pp.
     CODEN: PIXXD2
DT
     Patent
     English
LΑ
FAN.CNT 1
     PATENT NO.
                     KIND DATE
                                          APPLICATION NO.
                           _____
                                          _____
                           20000504
                                          WO 1999-US25536 19991028
    WO 2000024741
                      A2
PΙ
                           20000713
    WO 2000024741
                      A3
            AE, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CR, CU,
         W:
            CZ, DE, DK, DM, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL,
            IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA,
            MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI,
             SK, SL, TJ, TM, TR, TT, TZ, UA, UG, UZ, VN, YU, ZA, ZW, AM, AZ,
            BY, KG, KZ, MD, RU, TJ, TM
         RW: GH, GM, KE, LS, MW, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE,
            DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF,
            CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG
                      A2 20010912
                                         EP 1999-970991
                                                           19991028
     EP 1131322
         R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,
            IE, SI, LT, LV, FI, RO
PRAI US 1998-181239
                     19981028
    US 1999-421912
                     19991020
    WO 1999-US25536 19991028
GI
```

AB Title compds. [I; R1 = aryl or heterocyclyl; R2R3 = D'A'(CHR)m; R = H or alkyl; R4R5 = DA(CH2)n; A = O, S, (un)substituted NH; A' = O, S, (un)substituted NH, CH2; D = CH2 or CO; D' = CH2, CO, SO, SO2; m, n = 1-3]

were prepd. Thus, 3,4-BrFC6H3CHO was cyclocondensed with MeCOCH2CO2Et and

NH3 and the brominated product treated with liq. NH3 to give I (R1 = C6H3BrF-3,4, R2R3,R4R5 = CONHCH2). Data for biol. activity of I were given.

MSTR 1

$$G3 = SO2$$
 $G6 = 352$

$$G9 = 164$$

G10 = morpholino

DER: or pharmaceutically acceptable salts, amides, esters or prodrugs

MPL: claim 1

NTE: additional substitution and ring formation also claimed

NTE: substitution is restricted

```
ANSWER 6 OF 18 MARPAT COPYRIGHT 2002 ACS
     131:170632 MARPAT
AN
    Novel cyclic sulfonamide derivatives as metalloproteinase inhibitors
ΤI
     Duan, Jingwu; Chen, Lihua; Cherney, Robert J.; Decicco, Carl P.; Voss,
IN
    Matthew E.
     Du Pont Pharmaceuticals Company, USA
PA
     PCT Int. Appl., 144 pp.
SO
     CODEN: PIXXD2
DT
    Patent
LΑ
    English
FAN.CNT 1
     PATENT NO.
                     KIND DATE
                                          APPLICATION NO. DATE
                     _____
     _____
                                          _____
                     A1 19990819
    WO 9941246
                                          WO 1999-US2767
                                                           19990210
         W: AU, CA, IL, JP, MX, NZ
         RW: AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL,
            PT, SE
    AU 9925947
                           19990830
                                          AU 1999-25947
                                                           19990210
                      A1
    EP 1054877
                           20001129
                                          EP 1999-905898
                                                           19990210
        R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, PT, IE,
FΤ
PRAI US 1998-74301
                     19980211
    WO 1999-US2767
                     19990210
    Cyclic sulfonamides ACR1R2NR3SO2CR4:CR5R6 [A = CHO, alkanoyl, CO2H or
AΒ
    esters, CHRCO2H (R = H, Me, Et, i-Pr, vinyl, 1- or 2-propenyl),
CHRCONHOH,
    CONHOH or O-substituted derivs., (un) substituted amino, SH, CH2SH,
     (un) substituted SONH2 or SNHNH2, P(O)(OH)2, (un) substituted P(O)(OH)NH2;
    R1 = H, Q (carbocyclic or heterocyclic residue), alkylene-Q, alkenylene-
Q,
    alkynylene-Q, oxa- or aza-alkylene-Q, etc.; R2 = H, alkylene-H,
     alkenylene-H, alkynylene-H, oxa- or aza-alkylene-H, etc.; R3 and R5 form
    an (un)substituted 5-10 membered ring contg. 0-2 addnl. heteroatoms and
    0-1 double bonds; R4 and R6 form benzo or (un) substituted heteroarom.
    ring] were prepd. as metalloprotease inhibitors. Thus,
     (R)-4,5-dihydro-N-hydroxy-.alpha.-methyl-1,2,5-benzothiadiazepine-2(3H)-
    acetamide 1,2-dioxide was prepd. starting from the reaction of
    2-nitrobenzenesulfonyl chloride with D-alanine Me ester hydrochloride.
 MSTR 1
G1---G19--G28
G1
      = 180
```

G19 = 239-2 232-4

G45 = 225

DER: or pharmaceutically acceptable salts

MPL: claim 1

NTE: substitution is restricted

STE: or stereoisomers

RE.CNT 13 THERE ARE 13 CITED REFERENCES AVAILABLE FOR THIS RECORD

ALL CITATIONS AVAILABLE IN THE RE FORMAT

```
L20 ANSWER 7 OF 18 MARPAT COPYRIGHT 2002 ACS
```

AN 130:352182 MARPAT

TI Preparation of hydroxamic and carboxylic acid derivatives having MMP and TNF inhibitory activity

IN Baxter, Andrew Douglas; Owen, David Alan; Montana, John Gary; Nicholson, Elisabeth Jane Reed

PA Darwin Discovery Limited, UK

SO PCT Int. Appl., 26 pp.

CODEN: PIXXD2

DT Patent

LA English

FAN.CNT 1

GI

FAN.		1 CENT	NO.		KII	ND	DATE			A	PPLI	CATIO	ои ис	ο.	DATE			
																-		
PI	WO	9924	419		A.	1	1999	0520		W	0 19:	98-G	B339	6	1998	1112		
		W:	AL,	AM,	AT,	AU,	ΑZ,	BA,	BB,	BG,	BR,	BY,	CA,	CH,	CN,	CU,	CZ,	DE,
			DK,	EE,	ES,	FI,	GB,	GD,	GE,	GH,	GM,	HR,	HU,	ID,	IL,	IS,	JP,	KE,
			KG,	KP,	KR,	KZ,	LC,	LK,	LR,	LS,	LT,	LU,	LV,	MD,	MG,	MK,	MN,	MW,
			MX,	NO,	NZ,	PL,	PT,	RO,	RU,	SD,	SE,	SG,	SI,	SK,	SL,	ТJ,	TM,	TR,
			•	•	•	•	•	•		•	•	-	•		MD,	-	•	
		RW:	-	-				-							CY,			
													SE,	BF,	ВJ,	CF,	CG,	CI,
			•	•	•	•	ML,	•	•	-								
	ΑU	9910	470		A.	1	1999	0531		Αl	J 199	99-1	0470		1998	1112		
	ΕP	1030																
		R:	AT,	BE,	CH,	DE,	DK,	ES,	FR,	GB,	GR,	IT,	LI,	LU,	NL,	SE,	PT,	ΙE,
FI																		
	JP	2001	5228	43	T	2 :	2001	1120		J	P 20	00-52	2043	3	1998	1112		
	US	6310	880		B.	1 :	2001	1030		U:	5 20	00-5	6421	7	20000	0504		
PRAI	GB	1997	-2390	04	199	9711	12											
	GB	1998	-1404	43	199	9806	29											
	US	1997	-6879	93	199	9712	24											
	US	1998	-1903	334	199	9811	12											
	WO	1998-	-GB33	396	199	9811	12											

AB The title compds. [I; n =1-2; X = 0, S(0)0-2; Y = 0H, NHOH; W = CR3, N (when X = SO2); R1 = H, alkyl, alkenyl, etc.; R2 = H, alkyl; CR1R2 = (un)substituted cycloalkyl, heterocycloalkyl; R3-R5 = H, alkyl; R3R4 = a bond; R6-R9 = H, alkyl, aryl, etc.; R6 and R7, R7 and R8, R8 and R9, oe when n = 1, R5 and R6, and the carbons to which they are attached may form

aryl, heteroaryl, cycloalkenyl, heterocycloalkenyl], useful as therapeutic

agents, by virtue of having MMP and TNF inhibitory activity, were prepd. Thus, treatment of 3-methylbenzo[b]thiophene-2-acetic acid with BuLi/hexanes followed by addn. of 1-bromo-3-phenylpropane afforded 37%

II.

Compds. I are effective at 0.01-50 mg/kg/day.

MSTR 1

$$G1 = 41$$

$$G4 = 51$$

G5 =
$$alkyl<(1-6)>$$
 (SO (1-) G8)
G8 = 65

DER: and salts, solvates, hydrates, N-oxides, and protected amine,

carboy,

and hydroxamic derivatives

MPL: claim 1

NTE: additional ring formation also claimed

RE.CNT 14 THERE ARE 14 CITED REFERENCES AVAILABLE FOR THIS RECORD ALL CITATIONS AVAILABLE IN THE RE FORMAT

L20 ANSWER 8 OF 18 MARPAT COPYRIGHT 2002 ACS

AN 130:237589 MARPAT

TI Benzimidazolinones, benzoxazolinones, benzopiperazinones, indanones, and derivatives thereof as inhibitors of factor Xa

IN Han, Qi; Dominguez, Celia; Amparo, Eugene C.; Park, Jeongsong M.; Quan, Mimi L.; Rossi, Karen A.

PA Du Pont Pharmaceuticals Company, USA

SO PCT Int. Appl., 105 pp.

CODEN: PIXXD2

DT Patent

LA English

FAN.CNT 1

GΙ

raiv.	PATENT NO.			KIND DATE			APPLICATION NO.			o.	DATE							
PI	WO	9912	903		A.	1	1999	0318		WO	19	98-U	s187	29	1998	0908		
		W:	ΑU,	CA,	IL,	JP,	MX,	ΝZ										
		RW:	ΑT,	ΒE,	CH,	CY,	DE,	DK,	ES,	FI,	FR,	GB,	GR,	IE,	IT,	LU,	MC,	ΝL,
			PT,	SE														
	ΑU	9893	098		A.	1	1999	0329		AU	199	98-9	3098		1998	0908		
	ΕP	1015	429		A.	1	2000	0705		EP	199	98-9	4597	1	1998	0908		
		R:	ΑT,	BE,	CH,	DE,	DK,	ES,	FR,	GB,	GR,	IT,	LI,	LU,	NL,	SE,	PT,	IE,
FI																		
	US	6207	697		В:	1	2001	0327		US	199	98-1	4982	6	1998	0908		
	JР	2001	51588	37	T2	2	2001	0925		JP	20	00-5	1071	5	1998	0908		
	US	2001	0217	75	A.	1	2001	0913		US	20	01-7	7230	3	2001	0129		
PRAI	US	1997	-5828	38	199	9709	09											
	US	1998	-1498	326	199	9809	80											
	WO	1998	-US18	3729	199	9809	80											

AB The application describes inhibitors of factor Xa of formula I or pharmaceutically acceptable salt forms thereof [wherein W, X, Y, and Z may

be N or (un)substituted CH, with one substituent being cyano or (un)substituted carbamoyl, aminoalkyl, amidino, guanidino, or formamidino,

etc.; and J, K, and L combine to form certain substituted carbocycles or heterocycles bearing certain (un)substituted carbo- or heterocyclic substituents]. For instance, 5-cyanobenzimidazolin-2-one (prepd. from 4-amino-3-nitrobenzonitrile in 2 steps) was deprotonated with NaH in

DMF, N-alkylated with a corresponding 4-[(chloroacetyl)amino]biphenyl deriv.

give 2 regioisomeric products, and finally subjected to Pinner reaction at

the cyano group, to give title compd. II and its 5-amidino isomer. In

an

assay for factor Xa inhibition in vitro using the chromogenic synthetic substrate S2222, some compds. I had Ki of .ltoreq. 15 .mu.M, indicating effective activity.

MSTR 1

$$G1 = 9$$

$$G7 = 163-9 166-7$$

$$G8 = 196-1 197-55$$

19601933

$$G19 = CH (SO)$$

 $G22 = 193$

DER: or pharmaceutically acceptable salts

MPL: claim 1

NTE: substitution is restricted

STE: or stereoisomers

RE.CNT 7 THERE ARE 7 CITED REFERENCES AVAILABLE FOR THIS RECORD ALL CITATIONS AVAILABLE IN THE RE FORMAT

```
129:211720 MARPAT
AN
     Dopamine D4 receptor antagonist
ΤI
     Ohno, Yukihiro; Kojima, Atsuyuki; Wakabayashi, Junko; Tagashira, Rie
IN
     Sumitomo Pharmaceuticals Co., Ltd., Japan
PA
     PCT Int. Appl., 32 pp.
SO
     CODEN: PIXXD2
DΤ
     Patent
LΑ
     Japanese
FAN.CNT 1
     PATENT NO.
                      KIND
                            DATE
                                           APPLICATION NO.
                                                            DATE
                            19980903
                                           WO 1998-JP744
                                                            19980223
PΙ
     WO 9837893
                      A1
         W: AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE,
             DK, EE, ES, FI, GB, GE, GH, GM, GW, HU, ID, IL, IS, JP, KE, KG,
             KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO,
             NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA,
             UG, US, UZ, VN, YU, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM
         RW: GH, GM, KE, LS, MW, SD, SZ, UG, ZW, AT, BE, CH, DE, DK, ES, FI,
             FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM,
             GA, GN, ML, MR, NE, SN, TD, TG
    AU 9862306
                      A1
                           19980918
                                           AU 1998-62306
                                                            19980223
PRAI JP 1997-59809
                      19970226
    WO 1998-JP744
                      19980223
GI
```

$$Z=W=N$$
 $G=Ar$
 R^1
 R^2
 R^3
 R^3
 R^3

ANSWER 9 OF 18 MARPAT COPYRIGHT 2002 ACS

AB An imide deriv. represented by general formula (I) [wherein Z is represented by formula (2) (wherein B represents a carbonyl group or the like; for R1, R2, and R3, R1 and R2 combine with each other to form an optionally substituted hydrocarbon ring with R3 representing a hydrogen atom, or alternatively R1 and R3 may combine with each other to form an optionally substituted hydrocarbon ring with R2 representing a hydrogen atom; and n is 0 or 1), or a group represented by R4CO-NR5-(wherein R4 represents an optionally substituted Ph group or the like; and R5 represents a hydrogen atom or a lower alkyl group); W represents an optionally substituted lower alkylene group or the like, G represents a nitrogen atom or a methine group; Ar represents an optionally substituted

pyrimidyl group or the like; and Y represents a hydrogen atom or - (CH2)m-

(wherein m is 1, 2 or 3) with the other end being optionally bonded to the $\,$

o-position of Ar] or a pharmaceutically acceptable salt thereof is an antagonist against a dopamine D4 receptor that does not cause an extrapyramidal syndrom assocd. with dopamine D2 receptor antagonism and

is useful as a therapeutic agent for mental disorder, e.g., schizophrenia in a neg. state or the like and L-DOPA mental disorder during treatment of Parkinson's disease.

MSTR 1

$$G1 = 14$$

$$G2 = SO2$$

$$G3 = 110-10 \ 109-13$$

G5 = CH2

G9 = loweralkylene (SO)

MPL: claim 1

NTE: additional ring formation also claimed NTE: additional substitution also claimed

```
ANSWER 10 OF 18 MARPAT COPYRIGHT 2002 ACS
AN
     128:140729 MARPAT
     Preparation of 3-[2-(4-arylazino)ethyl]-2-indolones and analogs as
ΤI
     antiincontinence agents
     Kato, Kaneyoshi; Doi, Takayuki; Sugiura, Yoshihiro; Kawada, Mitsuru
IN
    Takeda Chemical Industries, Ltd., Japan; Kato, Kaneyoshi; Doi, Takayuki;
PA
     Sugiura, Yoshihiro; Kawada, Mitsuru
     PCT Int. Appl., 185 pp.
SO
    CODEN: PIXXD2
    Patent
DT
    English
LA
FAN.CNT 1
                            DATE
                                           APPLICATION NO.
                                                            DATE
    PATENT NO.
                      KIND
                            _____
                            19980122
                                           WO 1997-JP2447
                                                            19970715
PΙ
    WO 9802432
                       A1
         W: AL, AM, AU, AZ, BA, BB, BG, BR, BY, CA, CN, CU, CZ, EE, GE, HU,
             IL, IS, KG, KR, KZ, LC, LK, LR, LT, LV, MD, MG, MK, MN, MX, NO,
             NZ, PL, RO, RU, SG, SI, SK, SL, TJ, TM, TR, TT, UA, US, UZ, VN,
             YU, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM
         RW: GH, KE, LS, MW, SD, SZ, UG, ZW, AT, BE, CH, DE, DK, ES, FI, FR,
             GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA,
             GN, ML, MR, NE, SN, TD, TG
```

AU 1997-34607

JP 1997-188831

19970715

19970715

$$\begin{array}{c} Ph \\ \hline \\ R \\ \hline \\ I \end{array}$$

A1

A2

19960716

19970407

19970715

19980209 19981222

AB Title compds. [(ring-substituted) I; R = (CH2)mZ1Z2R2; R1,R2 = (un)substituted aryl; Z = atoms to complete a (heterocyclic) ring; Z1 = (un)substituted N-attached heterocyclylene; Z2 = bond or (oxo)alkylene; m

= 1-3] were prepd. Thus, PhCH2CO2Et was arylated by 4-FC6H4NO2 and the cyclized product converted in 3 steps to title compd. II. Data for biol.

activity of I were given.

MSTR 1

AU 9734607

PRAI JP 1996-186025

GI

JP 10338672

JP 1997-87980

WO 1997-JP2447

= SO2 G11

= alkyl<(1-6)> (SO (1-5) G21)G12

= phthalimido G21 or salts DER: MPL: claim 1

MSTR 2



G1 =
$$o-C6H4$$
 (SO G20)
G9 = $(0-2)$ CH2
G10 = $18-1$ 19-15

G11 = so2 G22 = NG30 = C(0)

DER: or salts

MPL: claim 21 L20 ANSWER 11 OF 18 MARPAT COPYRIGHT 2002 ACS

AN 126:144282 MARPAT

TI Preparation of thieno[3,2-e]-1,2-thiazine-6-sulfonamides useful as carbonic anhydrase inhibitors

IN Dean, Thomas R.; May, Jesse A.; Chen, Hwang-hsing

PA Alcon Laboratories, Inc., USA

SO U.S., 17 pp. Cont.-in-part of U.S. 5,378,703.

CODEN: USXXAM

DT Patent

LA English

FAN.CNT 4

These

IMI.CHI 3	•					
PATE	NT NO.	KIND	DATE	APP	LICATION NO.	DATE
PI US 5	585377	Α	19961217	US	1994-362716	19941223
US 5	153192	Α	19921006	US	1990-618765	19901127
ZA 9	102580	Α	19920129	ZA	1991-2580	19910408
US 5	240923	Α	19930831	US	1991-775313	19911009
US 5	378703	Α	19950103	US	1993-19011	19930218
PRAI US 1	990-506730	199004	109			
US 1	990-618765	199011	127			
US 1	991-775313	199110	009			
US 1	993-19011	199302	218			
US 1	990-506780	199004	109			
GI						

AB Thiophenesulfonamides [I; R1 and R3 are each satd. carbon atoms joined together to form an (un)substituted ring of 6 members; R2 = C1-8 alkyl substituted with COR7, C2-8 alkyl substituted with O2CR7, NHCOR7; R7 = C1-8 alkyl, (un)substituted C1-8 alkyl, C1-4 alkoxy, C2-4 alkoxy, (un)substituted NH2, Ph or R10; R10 = a monocyclic ring system selected from the group consisting of furan, thiophene, pyrrole, pyrazole, imidazole, triazole, tetrazole, oxazole, isoxazole, isothiazole, thiazole.

thiadiazole, pyridine, pyrimidine, pyridazine, and pyrazine] and pharmaceutical compns. contg. the compds. useful in controlling intraocular pressure are disclosed. Methods for controlling intraocular pressure through administration of the compns. are also disclosed.

compds. are useful as carbonic anhydrase inhibitors and also for treatment

of glaucoma (no data). Thus, (S)-N-(1,1-dimethylethyl)-3,4-dihydro-4-hydroxy-2H-thieno[3,2-e]-1,2-thiazine-6-sulfonamide1,1-dioxide (prepn. given) was treated with NaH in DMF at 0.degree. for 20 min and alkylated by Et 4-bromobutyrate at room temp. for 6 h to give Et

(S)-6-[[(1,1-dimethylethyl)amino]sulfonyl]-3,4-dihydro-4-hydroxy-2H-thieno[3,2-e]-1,2-thiazine-2-butanoate hydrochloride. The latter compd. was tosylated by tosyl chloride in THF contg. Et3N and underwent amination

with aq. ethylamine at room temp. overnight, followed by treatment with CF3CO2H at room temp. for 18 h to give the title compd. (II.HCl). Ophthalmic gel, soln., and suspension contg. II.HCl were formulated.

MSTR 1A

$$G_3 \xrightarrow{G_4 G_3} G_3$$

DER: or pharmaceutically acceptable salts

MPL: claim 1

NTE: G3 groups may form oxo

STE: 207-S

MSTR 1B

DER: or pharmaceutically acceptable salts

MPL: claim 1

NTE: G3 groups may form oxo

STE: 207-S

MSTR 2A

G5 = 42

$$G3$$
 $G2$
 $G3$
 $G3$
 $G3$

G6 = 264

H264-C(0)-G5

G14 = SO2

G15 = (1-3) 260

₽60 -G1

DER: or pharmaceutically acceptable salts

MPL: disclosure

NTE: substitution is restricted
NTE: G3 groups may form oxo

NTE: G6 and G10 may form a ring

STE: 207-S

MSTR 2B

G5 = 42

$$G3$$
 $G2$
 $G3$
 $G3$
 $G3$

G6 = 264

H264-C(0)-G5

G14 = SO2

G15 = (1-3) 260

₽60 G1

DER: or pharmaceutically acceptable salts

MPL: disclosure

NTE: substitution is restricted NTE: G3 groups may form oxo NTE: G6 and G10 may form a ring

STE: 207-S

L20 ANSWER 12 OF 18 MARPAT COPYRIGHT 2002 ACS

AN 125:167794 MARPAT

TI Preparation of indolylpiperidine dopaminergic agonists and antagonists

IN Maerz, Joachim; Greiner, hartmut; Seyfried, Christoph; Bartoszyk, Gerd

PA Merck Patent Gmbh, Germany

SO Ger. Offen., 15 pp.

CODEN: GWXXBX

DT Patent

LA German

FAN.CNT 1

FAN.	CNT I				
	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	DE 19500689	A1	19960718	DE 1995-19500689	19950112
	AU 9640862	A1	19960718	AU 1996-40862	19960108
	AU 704484	В2	19990422		
	CA 2166958	AA	19960713	CA 1996-2166958	19960110
	EP 722942	A1	19960724	EP 1996-100253	19960110
	R: AT, BE, C	H, DE	, DK, ES, FR,	GB, GR, IE, IT, LI	, LU, NL, PT, SE
	SK 281080	В6	20001107	SK 1996-43	19960110
	NO 9600125	Α	19960715	NO 1996-125	19960111
	ZA 9600228	Α	19960726	ZA 1996-228	19960111
	CN 1133840	Α	19961023	CN 1996-100424	19960111
	JP 08253474	A2	19961001	JP 1996-20619	19960112
	บร 5670511	Α	19970923	US 1996-586273	19960116
PRAI GI	DE 1995-19500689	1995	0112		

AB The title compds. [I; Q = (un)branched alkylene or oxyalkylene; R1 = H, alkyl, alkoxy, halogen, CF3, OCF3, etc.; R2 = arylcarbonylamino, arylsulfonylamino, etc.], useful as CNS agents (no data), are prepd. and I-contg. formulations presented. Thus, 2-(2-chloroethyl)-2,3-dihydro-1H-benz[de]isoquinoline-1,3-dione was reacted with 4-(5-fluoroindol-3-yl)piperidine, producing 2-[2-[4-(5-fluoro-3-indolyl)piperidino]ethyl]-2,3-dihydro-1H-benz[de]isoquinoline-1,3-dione tetrahydrate, m.p. 235.degree..

I

MSTR 1B

G2 = alkylene < (1-4) >

DER: and physiologically acceptable salts

MPL: claim 1

L20 ANSWER 13 OF 18 MARPAT COPYRIGHT 2002 ACS

AN 123:256744 MARPAT

TI Preparation of 1-oxo-1,2-dihydroisoquinolinoyl- and 1,1-dioxo-2H-1,2-benzothiazinoylguanidines as sodium-proton antiporter inhibitors.

IN Weichert, Andreas; Kleemann, Heinz-Werner; Lang, Hans-Jochen; Schwark, Jan-Robert; Albus, Udo; Scholz, Wolfgang

PA Hoechst A.-G., Germany

SO Eur. Pat. Appl., 13 pp.

CODEN: EPXXDW

DT Patent

LA German

FAN. CNT 1

FAN.	CNT 1 PATENT NO.		А	PPLICATION NO.	DATE	
PI	EP 659748	A1 19950	- 628 E	P 1994-120069	19941219	
	EP 659748	B1 20000	712			
	R: AT, BE,	CH, DE, DK,	ES, FR, GB,	GR, IE, IT, LI	, LU, NL,	PT, SE
	DE 4344550	A1 19950	629 D	E 1993-4344550	19931224	
	CA 2138466	AA 19950	625 C.	A 1994-2138466	19941219	
	AT 194605	E 20000	715 A	т 1994-120069	19941219	
	ES 2149233	T3 20001	101 E	S 1994-120069	19941219	
	FI 9406039	A 19950	625 F	I 1994-6039	19941222	
	AU 9481700	A1 19950	629 A	U 1994-81700	19941222	
	AU 683320	B2 19971	106			
	ZA 9410242	A 19950	802 Z.	A 1994-10242	19941222	
	JP 07206823	A2 19950	308 J	P 1994-319592	19941222	
	CN 1107840	A 19950	906 C	N 1994-119193	19941222	
	CN 1053899	В 20000	628			
	HU 72749	A2 19960	528 H	U 1994-3759	19941222	
	US 5547953	A 19960	320 U	S 1994-362003	19941222	
	NO 9405015	A 19950	626 N	0 1994-5015	19941223	
	DE 1993-4344550	19931224				
GI						

$$R^1$$
 R^2N
 X
 NH_2
 NH_2

AB Title compds. [I; X = CO, SO2; R1 = H, (substituted) alkyl, cycloalkyl, Ph; R2 = H, alkyl], were prepd. Thus, Me 4-bromo-3-sulfamoylbenzoate (prepn. given) was coupled with phenylacetylene using (PPh3)2PdCl2, CuI, and BuNH2 to give the 4-phenylethynyl deriv., which was cyclized using Hg(OAc)2 in conc. H2SO4 to give Me 1,1-dioxo-3-phenyl-2H-1,2-

7-carboxylate. The latter was transformed to 1,1-dioxo-3-phenyl-2H-1,2-benzothiazin-7-carboxylic acid guanidide hydrochloride. This inhibited sodium-proton antiporter from rabbit erythrocytes with IC50 = 0.9 .times.

10-6 M.

benzothiazin-

MSTR 2



MPL: claim 4

L20 ANSWER 14 OF 18 MARPAT COPYRIGHT 2002 ACS

AN 123:83377 MARPAT

TI Sulfonamides useful as carbonic anhydrase inhibitors

IN Dean, Thomas R.; Chen, Hwang-Hsing; May, Jesse A.

PA Alcon Laboratories, Inc., USA

SO U.S., 25 pp. Cont.-in-part of U.S. 5,240,923.

CODEN: USXXAM

DT Patent

LA English

FAN.CNT 4

L14	O11 I	•					
	PATENT NO.		KIND	DATE	AP	PLICATION NO.	DATE
ΡI	US	5378703	Α	19950103	US	1993-19011	19930218
	US	5153192	Α	19921006	US	1990-618765	19901127
	US	5240923	Α	19930831	US	1991-775313	19911009
	US	5679670	Α	19971021	US	1994-357623	19941215
	US	5585377	Α	19961217	US	1994-362716	19941223
PRAI	US	1990-506780	19900	409			
	US	1990-618765	19901	127			
	US	1991-775313	19911	009			
	US	1990-506730	19900	409			
	US	1993-19011	199302	218			
GT							

AB Sulfonamides I [R1 and R3 are each satd. carbon atoms joined together to form a ring of 6 members in which said carbon atoms can be unsubstituted or substituted optionally with R4; R2 is e.g., H; C1-8 alkyl; C2-8 alkyl substituted with OH; R4 is e.g., OH; C1-4 alkyl unsubstituted or substituted optionally with OH] and pharmaceutical compns. contg. the compds. useful in controlling intraocular pressure (no data) are disclosed. Methods for controlling intraocular pressure through administration of the compns. are also disclosed. Ophthalmic formulations

were given.

MSTR 2

G1-902-NH2

G1 = 6

$$\begin{array}{c} S \longrightarrow \begin{array}{c} G12 \\ N11 \\ G11 \end{array}$$

G2 = 284

$$G12 = S02$$

G19 = (0-2) 180

មុទ្ធ០ G20

G31 = morpholino

or pharmaceutically acceptable salts DER:

MPL:

disclosure substitution is restricted NTE:

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L20 ANSWER 15 OF 18 MARPAT COPYRIGHT 2002 ACS
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AN 118:219850 MARPAT

TI Preparation of serotoninergic antagonists for pharmaceuticals

PA Rhone-Poulenc Rorer SA, Fr.

SO Eur. Pat. Appl., 16 pp.

CODEN: EPXXDW

DT Patent

LA French

FAN.CNT 1

FAN.	CNT	1					
	PA'	TENT NO.	KIND	DATE		APPLICATION NO.	DATE
PI		511073 R: PT	A1	19921028		EP 1992-401109	19920421
	FR	2675802				FR 1991-5170	19910426
		2675802					
	CA	2103562	AA	19921027		CA 1992-2103562	19920421
	WO	9219624	A1	19921112		WO 1992-FR354	19920421
		W: CA, FI,	JP, NO	, US			
		RW: AT, BE,	CH, DE	, DK, ES,	FR,	GB, GR, IT, LU, MC	, NL, SE
	ΕP	583322	A1	19940223		EP 1992-909776	19920421
		R: AT, BE,	CH, DE	, DK, ES,	FR,	GB, GR, IT, LI, LU	, NL, SE
	JP	06507162	Т2	19940811		JP 1992-509239	19920421
	NO	9303121	Α	19930901		NO 1993-3121	19930901
	US	5563144	Α	19961008		US 1995-470726	19950606
PRAI		1991-5170					
	WO	1992-FR354	19920	421			
	US	1993-137091	19931	026			
GI							

AB R1(CH2)n-Het (where R1 = I, II, III; n = 1-4; Het = e.g., 4-phenyl-1,2,3,6-tetrahydro-1-pyridyl; R2 = H, Ph; R3 = H, halo, heterocycle; R4 = CO, SO2; R5 = SiMe2, CMe2) are prepd. for use in treatment of diseases involving serotonin. Thus, 3-(3-chloropropyl)-

1,1dimethyl-5-fluoro-4-oxo-1,2,3,4-tetrahydro-3,1-benzazasiline was treated with 1-phenylpiperazine in the presence of Et3N in toluene soln. to give 1,1-dimethyl-5-fluoro-4-oxo-3-[3-(4-phenyl-1-piperazinyl)propyl]-

1,2,3,4tetrahydro-3,1-benzazasiline. Tablets contg. 50 mg of this compd. were prepd.

MSTR 1

$$G3 = 36-2 41-34$$

G4 = SO2 G5 = CMe2 G6 = 83

G9 = (1-4) CH2

DER: and mineral or organic acid salts

MPL: claim 1

NTE: substitution is restricted

L20 ANSWER 16 OF 18 MARPAT COPYRIGHT 2002 ACS

AN 115:239772 MARPAT

TI Pharmaceutical compositions containing [4-(2-pyrimidinyl)-1-piperazinyl]butyl derivatives for treatment of intestinal motility disorders

IN Croci, Tiziano; Bianchetti, Alberto; Manara, Luciano

PA Midy S.p.A., Italy

SO Fr. Demande, 12 pp. CODEN: FRXXBL

DT Patent

LA French

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
ΡI	FR 2654934	A1	19910531	FR 1989-15734	19891129
	FR 2654934	В1	19940930		

AB Pharmaceutical compns. contg. the title derivs. (Markush included) are provided for treatment of intestinal motility disorders, esp. constipation. Tablet formulations of buspirone-HCl and of gepirone-HCl and a dragee formulation of buspirone-HCl are included.

Anticonstipation

activity was tested in rats.

MSTR 1

$$G1-CH2-A$$

$$G1 = 84$$

G12 = S02

 $G13 = 91-84 \ 92-86 \ / \ 92-84 \ 91-86$

9¢(0}G14

G14 = CH2

DER: and pharmaceutically acceptable salts

MPL: claim 1

```
AN
    113:115087 MARPAT
    Aminomethyltetralins, -chromanes, and related compounds as CNS agents
TI
    Junge, Bodo; Schohe, Rudolf; Seidel, Peter Rudolf; Glaser, Thomas;
IN
Traber,
    Joerg; Benz, Ulrich; Schuurman, Teunis; De Vry, Jean Marie Viktor
    Bayer A.-G., Fed. Rep. Ger.
PA
    Ger. Offen., 63 pp.
    CODEN: GWXXBX
DT
    Patent
    German
LA
FAN.CNT 2
                                       APPLICATION NO. DATE
    PATENT NO.
                    KIND DATE
                    ----
                         _____
                    A1
PΙ
    DE 3901814
                         19900201
                                       DE 1989-3901814 19890123
    NO 8902892
                    Α
                                       NO 1989-2892
                         19900129
                                                       19890713
                   в 19950418
    NO 177144
                   С
    NO 177144
                        19950726
                   A2 19900131
                                       EP 1989-113220
                                                       19890719
    EP 352613
    EP 352613
                   A3 19901128
    EP 352613
                         19940420
                    В1
        R: AT, BE, CH, DE, ES, FR, GB, GR, IT, LI, LU, NL, SE
                                      AT 1989-113220 19890719
    AT 104668
                   E
                         19940515
                    T3 19940716
                                       ES 1989-113220 19890719
    ES 2052829
                                                      19890726
    FI 8903571
                    A 19900129
                                       FI 1989-3571
                        19950929
    FI 95246
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    FI 95246
                    С
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                                       AU 1989-38989
    AU 8938989
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                                                      19890726
    AU 627478
                    B2
                         19920827
                    A5
                         19910228
                                       DD 1989-331171
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    DD 287500
    DK 8903713
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                                       DK 1989-3713
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                        19900425
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    HU 58036
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                                                      19890727
    IL 91126
                   A1 19950330
                   Α
                                       CN 1989-105487 19890728
    CN 1039809
                        19900221
    CN 1024667
                         19940525
                    В
    JP 02096552
                    A2
                         19900409
                                       JP 1989-194467
                                                      19890728
    JP 2963107
                    B2 19991012
    US 5137901
                                       US 1989-412694
                                                      19890926
                    A 19920811
                                       US 1992-864953 19920407
    US 5300523
                    A 19940405
    US 5506246
                        19960409
                                       US 1993-171941 19931221
                    Α
                                       US 1995-484541 19950607
    US 5585392
                        19961217
                    Α
PRAI DE 1988-3825609 19880728
    DE 1989-3901814 19890123
    US 1989-378732
                    19890712
    EP 1989-113220
                    19890719
    US 1989-412694
                   19890926
    US 1992-864853
                  19920407
    US 1992-864953
                   19920407
    US 1993-171941
                  19931221
GI
```

L20 ANSWER 17 OF 18 MARPAT COPYRIGHT 2002 ACS

^{*} STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT *

AB The title compds. [I; A, D = CH2, O, S, NH, CH, N; B, C = CH2, CH, N; E, \mathbf{F}

= H, alkyl, alkoxy, halo, NO2, cyano, CF3, CF3O, aminocarbonyl; EF =
atoms

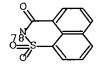
to complete an (unsatd.) carbocyclic ring; Y = (unsatd.) alkylene; Z = NH2, CO2H, alkoxycarbonyl, alkylthio, alkylsulfonyl, CONH2, NHQ1, Q2-Q5, etc.; R1 = H, alkyl, aralkyl, heteroarylalkyl, YZ] were prepd. as 5-HT1A antagonists (no data). Thus, a mixt. of 2-aminomethyl-8-methoxytetralin,

Et3N, 2-(4-bromobutyl)-1, 2-benzisothiazol-3(2H)-one 1, 1-dioxide, and DMF was stirred 24 h at 40.degree. to give 15% dialkylated deriv. II and 28% of the monoalkylated deriv.

MSTR 5C

G5_C(0)_G1__G2

G1 = Ak < (1-5) >G2 = 78



G5 = imidazolyl MPL: claim 5

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ANSWER 18 OF 18 MARPAT COPYRIGHT 2002 ACS
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AN 112:178657 MARPAT

Preparation of 1,3,4,5-tetrahydrobenz[c,d]indoles as drugs ΤI

Junge, Bodo; Richter, Bernd; Glaser, Thomas; Traber, Joerg IN

Bayer A.-G., Fed. Rep. Ger. PA

Eur. Pat. Appl., 50 pp. SO

CODEN: EPXXDW

German

DTPatent

LA

GI

FAN.	CNT	1					
	PA			DATE	APP	LICATION NO.	DATE
ΡI	EP	332968	 A1	19890920	EP	1989-103871	19890306
		332968					
					. GR. I	T, LI, LU, NL	, SE
	DE	3809155				1988-3809155	
	NO	8900892	Α			1989-892	
		90093				1989-103871	
	ES	2058365		19941101	ES	1989-103871	19890306
	US	5021438	Α	19910604	US	1989-324518	19890315
	IL	89623	A 1	19930114	ΙL	1989-89623	19890315
	FI	8901252	Α	19890919	FI	1989-1252	19890316
	DD	283606	A5	19901017	DD	1989-326650	19890316
	DK	8901317	Α	19890919	DK	1989-1317	19890317
	ZA	8902049	Α	19891129	ZA	1989-2049	19890317
	HU	50767	A2	19900328	HU	1989-1258	19890317
	HU	204034	В	19911128			
	JP	02204479	A2	19900814	JP	1989-64053	19890317
	CN	1036566	Α	19891025	CN	1989-101472	19890318
	AU	8931526	A1	19890928	AU	1989-31526	19890320
	ΑU	614343	B2	19910829			
PRAI	DE	1988-3809155	198803	318			
	EP	1989-103871	198903	306			

$$Q^{1} = Q^{2} = Q^{2} = Q^{2} = Q^{3} = Q^{3$$

The title compds. [I; Rl = H, alkyl, aralkyl, heteroarylalkyl; X = H, AΒ OMe,

OH, SMe, halo, cyano, CONH2; Y = alkylene; Z = cyano, NR2R3, OR4, SOmR5, CO2R6, CONR7R8; R2, R3 = H, (cyclo)alkyl, alkenyl, (substituted) aryl,

aralkyl, COR9, SO2R10; R2R3 = Q1, Q2, Q3, etc.; R4 = H, (cyclo)alkyl, alkenyl, aryl, aralkyl, acyl, alkoxycarbonyl, etc.; R5 = (cyclo)alkyl, alkenyl, (substituted) aryl, aralkyl, NR7R8; R6 = H, (cyclo)alkyl, alkenyl, aryl, aralkyl; R7, R8 = H, R6; R9 = H, amino, alkyl, alkoxy, (substituted) aryl, aralkyl, aralkoxy, heteroaryl; R10 = (substituted) alkyl, aryl, aralkyl, heteroaryl, NR7R8; m = 0-2], useful as central nervous system agents, were prepd. Thus, 6-methoxy-4-amino-1,3,4,5-tetrahydrobenz[c,d]indole and Et3N in DMFwere treated dropwise with 2-(4-bromobutyl)-1,2-benzisothiazol-3(2H)-one 1,1-dioxide in DMF and the mixt. was stirred 4 h at 50.degree. to give I [R1 = H, X = OMe, Y = (CH2)4, Z = Q1]. I bound to 5 HT1 receptors with IC values of 0.7-8 nmol/L. Several I showed antidepressant activity.

MSTR 6C

G4---G5

G3 = Ak < (-5) > G4 = 17

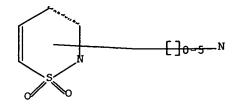
193-C(0)-G8

G5 = 85

G8 = imidazolyl MPL: claim 6

1

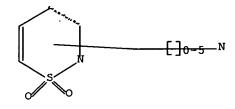
=> d 11; d 15; d his L1 HAS NO ANSWERS L1 STR



Structure attributes must be viewed using STN Express query preparation.

L5 HAS NO ANSWERS

L5 STR



Structure attributes must be viewed using STN Express query preparation.

(FILE 'HOME' ENTERED AT 14:38:57 ON 01 FEB 2002)

FILE 'REGISTRY' ENTERED AT 14:39:04 ON 01 FEB 2002

L1 STRUCTURE UPLOADED

L2 8 S L1

L3 274 S L1 FUL

FILE 'CAPLUS' ENTERED AT 14:39:36 ON 01 FEB 2002

L4 52 S L3

FILE 'STNGUIDE' ENTERED AT 14:39:44 ON 01 FEB 2002

FILE 'REGISTRY' ENTERED AT 14:40:06 ON 01 FEB 2002

L5 STRUCTURE UPLOADED

L6 2 S L5 SAM SUB=L3

L7 18 S L5 FUL SUB=L3

L8 256 S L3 NOT L7

FILE 'CAPLUS' ENTERED AT 14:41:08 ON 01 FEB 2002

L9 49 S L8

FILE 'BEILSTEIN' ENTERED AT 14:45:38 ON 01 FEB 2002

L10 5 S L1

L11 50 S L1 FUL

L12 2 S L5 SUB=L11 FUL

L13 48 S L11 NOT L12

L14 22 S L13 NOT L9

FILE 'MARPAT' ENTERED AT 14:48:04 ON 01 FEB 2002

L15 5 S L1

L16 30 S L1 FUL

L17	19 S L16 NOT L9	
L18	0 S L5 SUB=L16 SA	١M
L19	1 S L5 FUL SUB=L16	ŝ
L20	18 S L17 NOT L19	

=> log y

COST IN U.S. DOLLARS	SINCE FILE ENTRY	TOTAL SESSION
FULL ESTIMATED COST	199.30	931.11
DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS)	SINCE FILE	TOTAL
CA SUBSCRIBER PRICE	ENTRY -10.62	SESSION -40.98

STN INTERNATIONAL LOGOFF AT 14:51:38 ON 01 FEB 2002

L9 ANSWER 25 OF 49 CAPLUS COPYRIGHT 2002 ACS

AN 1991:102026 CAPLUS

DN 114:102026

Preparation of amides of 2H-4-hydroxy-2,5,7-trimethylpyrido[3,2-e]-1,2-thiazine-2-carboxylic acid 1,1-dioxide as antiinflammatories and immunosuppressants

IN Malinka, Wieslaw; Zawisza, Tadeusz; Gieldanowski, Jerzy

PA Akademia Medyczna, Wroclaw, Pol.

SO Pol., 3 pp. CODEN: POXXA7

DT Patent

LA Polish

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI GI	PL 139585	В2	19870228	PL 1985-253057	19850422

AB The title compds. (I; R = Ph, cyclohexyl, 2-thiazolyl, 2-pyridyl; or NHR is replaced by 4-methylpiperazino), with antiinflammatory and immunosuppressive activities (no data), were prepd. by amidation of Et 2H-4-hydroxy-2,5,7-trimethylpyrido[3,2-e]-1,2-thiazine-3-carboxylate 1,1-dioxide with corresponding amines in boiling xylene under N in the presence of type 4A mol. sieves (Soxhlet extractor, 2 equiv amine).

Resp.

yields were 81, 90, 84, 82, and 35%.

Ι

IT 109418-08-8P

RL: SPN (Synthetic preparation); PREP (Preparation) (prepn. of, as antiinflammatory and immunosuppressant)

RN 109418-08-8 CAPLUS

CN Piperazine, 1-[(4-hydroxy-2,5,7-trimethyl-1,1-dioxido-2H-pyrido[3,2-e]-1,2-

thiazin-3-yl)carbonyl]-4-methyl- (9CI) (CA INDEX NAME)

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L9 ANSWER 26 OF 49 CAPLUS COPYRIGHT 2002 ACS
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AN 1990:235290 CAPLUS

DN 112:235290

TI Preparation of 1,3-disubstituted pyrrolidines as serotonin (partial) agonists and antagonists

IN Schohe, Rudolf; Seidel, Peter Rudolf; Traber, Jorg; Glaser, Thomas

PA Bayer A.-G., Fed. Rep. Ger.

SO Eur. Pat. Appl., 50 pp.

CODEN: EPXXDW

DT Patent

LA German

FAN.CNT 2

GI

FAN.CNT 2											
						DATE		APPLICATION NO.			DATE
PI	EP	338331 A 338331 E		A1					1989-1060		19890406
	ы							GR, IT, LI, NL, SE			
	DE								1988-3835		
		81652 2045229 5037841		E T3							
	US					19910806		US	1989-3369	77	19890412
									1989-3305		
	AU	625817		В2		19920716					
									1989-8997		
									1989-1864		
									1989-9654		
									1989-2823		
	US	5274097							1991-6827		
		5453437						US	1993-1183	76	19930908
PRAI	DE	1988-3812	989			19880419					
	DE	1988-3835	291			19881015					
	ΕP	1989-1060	23			19890406					
		1989-3369									
	US	1989-336977				19890412					
	US	1991-6827	85			19910409					
os	CAS	SREACT 112	:235	290;	M	ARPAT 112	:2352	290			

$$X-A$$
 $(CH_2)_p$
 $Q1$
 CN
 NR^1
 NR^2
 NR^2
 Q^2
 $N < CO$
 $N < CO$

AB The title compds. [I; A = (fused) heteroaryl; B = cyano, CO2R1, CONR2R3, SO2NR2R3, SOmR4, NR5R6, C.tplbond.CCH2NR5R6; X = OCH2, CH2O, O; R1 = H, C1-12 alkyl, C5-8 cycloalkyl, C2-12 alkenyl, aryl, aralkyl; R2, R3 = H, C1-17 alkyl, (un)substituted aryl, etc.; R5, R6 = COR2, SO2R8, any of definitions for R2, R3; R7 = NHR9, C1-12 alkyl, C1-17 alkoxy, etc.; R8 = C5-8 cycloalkyl, (un)substituted C1-12 alkyl, (un)substituted (hetero)aryl, NR2R3; R9 = H, C5-8 cycloalkyl, (un)substituted C1-12 alkyl,

aralkyl, (hetero)aryl, etc.; NR5R6 can form a (fused) heterocyclic ring, e.g., Q1, Q2, etc.; n=1-10; n=0-2] and their salts were prepd. as 5-hydroxytryptamine agonists, partial agonists (no data), and antagonists,

useful for treatment of serotoninergic system-related CNS diseases. A mixt. of 3-(2-cyanophenoxy)pyrrolidine, 2-(4-bromobutyl)benzothiazol-3(2H)-

one-1,1-dioxide, and Et3N in DMF was stirred 20 h at 45.degree. to give II

which was converted to its oxalate. The latter in vitro antagonized serotonin with an inhibition const. Ki = 2 nM.

IT 127341-98-4P

RL: SPN (Synthetic preparation); PREP (Preparation) (prepn. of, as serotonin agonist or antagonist)

RN 127341-98-4 CAPLUS

CN 1,5-Naphthalenedisulfonic acid, compd. with 6-[4-[3-(2-methoxyphenoxy)-1-

pyrrolidinyl]butyl]-6H-dibenzo[c,e][1,2]thiazine 5,5-dioxide (1:2) (9CI)
(CA INDEX NAME)

CM 1

CRN 127341-97-3 CMF C27 H30 N2 O4 S

CM 2 CRN 81-04-9 CMF C10 H8 O6 S2

L9 ANSWER 24 OF 49 CAPLUS COPYRIGHT 2002 ACS

AN 1991:492161 CAPLUS

DN 115:92161

TI Naphthosultam derivatives: a new class of potent and selective 5-HT2 antagonists

AU Malleron, Jean Luc; Comte, Marie Therese; Gueremy, Claude; Peyronel, Jean

Francis; Truchon, Alain; Blanchard, Jean Charles; Doble, Adam; Piot, Odile; Zundel, Jean Luc; et al.

CS Cent. Rech. Vitry Alfortville, Rhone-Poulenc Rorer, Vitry-sur-Seine, F-94403, Fr.

SO J. Med. Chem. (1991), 34(8), 2477-83 CODEN: JMCMAR; ISSN: 0022-2623

DT Journal

LA English

GΙ

AB A series of 2-(aminoalkyl)naphtho[1,8-cd]isothiazole 1,1-dioxides I (R = aminoalkyl) was synthesized from I (R = H) and examd. in various receptor

binding tests. Most compds. demonstrated high affinity for the 5-HT2 receptor with moderate to high selectivity. A member of this series, compd. I [R = 3-[4-(p-fluorophenyl)piperazino]propyl] (RP 62203), displays

high 5-HT2 receptor affinity (Ki = 0.26 nM), which is resp. more than 100

and 1000 times higher than its affinity for .alpha.1 (Ki = 38 nM) and D2 (Ki >1000 nM) receptors. This compd. is a potent orally effective and long lasting 5-HT2 antagonist in the mescaline-induced head-twitches test

in mice and rats.

IT 134133-55-4P 134133-67-8P

RL: SPN (Synthetic preparation); PREP (Preparation)
 (prepn. of)

RN 134133-55-4 CAPLUS

CN 6H-Dibenzo[c,e][1,2]thiazine, 6-[3-(3,6-dihydro-4-phenyl-1(2H)-pyridinyl)propyl]-, 5,5-dioxide (9CI) (CA INDEX NAME)

RN 134133-67-8 CAPLUS
CN 6H-Dibenzo[c,e][1,2]thiazine, 6-[3-(3,6-dihydro-4-phenyl-1(2H)-pyridinyl)propyl]-, 5,5-dioxide, ethanedioate (1:1) (9CI) (CA INDEX NAME)

CM 1

CRN 134133-55-4 CMF C26 H26 N2 O2 S

CM 2

CRN 144-62-7 CMF C2 H2 O4

L9 ANSWER 21 OF 49 CAPLUS COPYRIGHT 2002 ACS

AN 1993:408726 CAPLUS

DN 119:8726

TI New indole derivatives as potent and selective serotonin uptake inhibitors

AU Malleron, Jean Luc; Gueremy, Claude; Mignani, Serge; Peyronel, Jean Francois; Truchon, Alain; Blanchard, Jean Charles; Doble, Adam; Laduron, Pierre; Piot, Odile; et al.

CS Dep. Chim. Pharm. Biol., Cent. Recher. Vitry-Alfortville, Vitry-sur-Seine,

F.94403, Fr.

SO J. Med. Chem. (1993), 36(9), 1194-202 CODEN: JMCMAR; ISSN: 0022-2623

DT Journal

LA English

GΙ

DMF

AB A series of new indole derivs., e.g., I (R = H, Me, COMe, R1 = H, OMe, OH,

Cl, Br, F, n = 2-4), has been prepd. in the search for novel 5-HT uptake inhibitors. These compds. were obtained by the condensation of N-(chloroalkyl)naphthalenesultam derivs., e.g., II, with the appropriate amine, e.g., pyridinylindole III, in presence of a base, at reflux of

or THF. The yields were moderate (12-56%), except for a piperazine deriv.

(85%). The affinity of the compds. for uptake site and 5-HT2, .alpha.1, and D2 receptors was measured. Some compds. were studied in vivo by

potentiating effect of 5-HTP-induced symptomatol. The most potent and selective (uptake, 5-HT2 vs. Al, D2 sites) compds. contain a 3-[(4-piperidinyl)methyl]indole moiety. 5-Fluoro-3-[(4-piperidinyl)methyllindole itself displayed a high affinity for the

 $\label{lem:piperidinyl} \verb| methyl| indole itself displayed a high affinity for the uptake$

site but was devoided of in vivo activity. N-Methylation of this compd. abolished the affinity. In contrast N-substitution by a two-carbon chain

linked to a naphthalenesultam or related heterocycle led to compds. exhibiting high affinity for the uptake site. One of them, 1-[2-[4-((5-fluoro-1H-indol-3-yl)methyl)-1-piperidinyl]ethyl]-5,6-dihydro-

1H,4H-1,2,5-thiadiazolo[4,3,2-ij]quinoline 2,2-dioxide was found as
active
 as fluoxetine in vivo.

IT 147595-42-4P
 RL: SPN (Synthetic preparation); PREP (Preparation)
 (prepn. and serotonin antagonist activity of)

RN 147595-42-4 CAPLUS
CN 6H-Dibenzo[c,e][1,2]thiazine, 6-[2-[4-[(5-fluoro-1H-indol-3-yl)methyl]-1 piperidinyl]ethyl]-, 5,5-dioxide (9CI) (CA INDEX NAME)

IT 148132-68-7P

RN 148132-68-7 CAPLUS

CN 6H-Dibenzo[c,e][1,2] thiazine, 6-[2-[4-[(5-fluoro-1H-indol-3-yl)methyl]-[4-[(5-fluoro-1H-indol-

piperidinyl]ethyl]-, 5,5-dioxide, ethanedioate (1:1) (9CI) (CA INDEX NAME)

CM 1

1-

CRN 147595-42-4 CMF C28 H28 F N3 O2 S

CM 2

CRN 144-62-7 CMF C2 H2 O4

L9 ANSWER 23 OF 49 CAPLUS COPYRIGHT 2002 ACS

AN 1991:583316 CAPLUS

DN 115:183316

TI Preparation and formulation of thiadiazolo[4,3,2-ij] quinolines and analogs

as serotonin antagonists

IN Comte, Marie Therese; Gueremy, Claude; Malleron, Jean Luc; Peyronnel, Jean

Francois; Truchon, Alain

PA Rhone-Poulenc Sante, Fr.

SO Eur. Pat. Appl., 19 pp.

CODEN: EPXXDW

DT Patent

LA French

FAN.CNT 1

I AU	PATENT NO.		KIND	DATE	API	PLICATION NO	DATE
PI		433149			EP	1990-403502	2 19901210
		433149					
	ΕP	433149					
		R: AT, BE,					
		2655652			FR	1989-16459	19891213
		2655652					
	FR	2662696					
	ΑT						2 19901210
	ES						2 19901210
	FI	9006108	Α	19910614	FI	1990-6108	19901212
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	CA	2032104	AA	19910614	CA	1990-203210	04 19901212
	AU	9067981	A 1	19910620	AU	1990-67981	19901212
	AU	643241	B2	19931111			
	HU	56566	A2	19910930	HU	1990-8242	19901212
	HU	209301	В	19940428			
	ZA	9009982	Α	19911030	ZA	1990-9982	19901212
	JP	03255063	A2	19911113	JP	1990-410112	2 19901213
	US	5130313	Α	19920714	US	1990-627101	1 19901213
PRAI	FR	1989-16459		19891213			
	FR	1990-6943		19900605			
	ΕP	1990-403502		19901210			
os		RPAT 115:18331					
GI							

$$Q^{1}=$$

$$Q^{2}=$$

$$Q^{2}=$$

$$Q^{2}=$$

$$Q^{2}=$$

AB R2R3N(CH2)nR1 [I; R1 = (substituted) 1,2,3,6-tetrahydro-1-pyridyl, 1-piperazinyl, etc.; R2 = SO2R4; R4 = alkyl, Ph; R3 = Ph, naphthyl; or NR2R3 = Q1, Q2, etc.; n = 2 to 4] were prepd. I are useful as serotonin antagonists (no data). Treatment of 5,6-dihydro-1H,4H-1,2,5-

thiadiazolo[4,3,2-ij]quinoline 2,2-dioxide with NaH, followed by reaction

with 1-(3-chloropropyl)-4-phenyl-1,2,3,6-tetrahydropyridine, gave 1-[3-(4-phenyl-1,2,3,6-tetrahydro-1-pyridyl)propyl]-5,6-dihydro-1H,4H-1,2,5-thiadiazolo[4,3,2-ij]quinoline 2,2-dioxide.

IT 134133-67-8P 136481-49-7P 136481-50-0P

RL: SPN (Synthetic preparation); PREP (Preparation) (prepn. of, as serotonin antagonist)

RN 134133-67-8 CAPLUS

CN 6H-Dibenzo[c,e][1,2]thiazine, 6-[3-(3,6-dihydro-4-phenyl-1(2H)-pyridinyl)propyl]-, 5,5-dioxide, ethanedioate (1:1) (9CI) (CA INDEX NAME)

CM 1

CRN 134133-55-4 CMF C26 H26 N2 O2 S

CM 2

CRN 144-62-7 CMF C2 H2 O4

RN 136481-49-7 CAPLUS

CN Methanone, [1-[3-(5,5-dioxido-6H-dibenzo[c,e][1,2]thiazin-6-yl)propyl]-

4piperidinyl](4-fluorophenyl)- (9CI) (CA INDEX NAME)

RN 136481-50-0 CAPLUS

CN 6H-Dibenzo[c,e][1,2]thiazine, 6-[3-[4-(4-fluorophenyl)-1-

piperazinyl]propyl]-, 5,5-dioxide (9CI) (CA INDEX NAME)

ANSWER 19 OF 49 CAPLUS COPYRIGHT 2002 ACS L9 1993:517168 CAPLUS AN 119:117168 DN ΤI New indole derivatives as potent and selective serotonin uptake inhibitors. [Erratum to document cited in CA119(2):8726n] Malleron, Jean Luc; Gueremy, Claude; Mignani, Serge; Peyronel, Jean ΑU Francois; Truchon, Alain; Blanchard, Jean Charles; Doble, Adam; Laduron, Pierre; Piot, Odile; et al. Dep. Chim. Pharm. Biol., Cent. Recher. Vitry-Alfortville, Vitry-sur-CS F94403, Fr. J. Med. Chem. (1993), 36(15), 2242 SO CODEN: JMCMAR; ISSN: 0022-2623 DTJournal LА English The omission of an author name has been cor. The error was not AB in the abstr. or the index entries. IT 147595-42-4P RL: SPN (Synthetic preparation); PREP (Preparation) (prepn. and serotonin antagonist activity of (Erratum)) RN 147595-42-4 CAPLUS 6H-Dibenzo[c,e][1,2]thiazine, 6-[2-[4-[(5-fluoro-1H-indol-3-yl)]]methyl]-CN 1piperidinyl]ethyl]-, 5,5-dioxide (9CI) (CA INDEX NAME)

IT 148132-68-7P
 RL: SPN (Synthetic preparation); PREP (Preparation)
 (prepn. of (Erratum))
RN 148132-68-7 CAPLUS
CN 6H-Dibenzo[c,e][1,2]thiazine, 6-[2-[4-[(5-fluoro-1H-indol-3-yl)methyl]-1 piperidinyl]ethyl]-, 5,5-dioxide, ethanedioate (1:1) (9CI) (CA INDEX NAME)

CM 1
CRN 147595-42-4
CMF C28 H28 F N3 O2 S

CM 2

CRN 144-62-7 CMF C2 H2 O4

L9 ANSWER 20 OF 49 CAPLUS COPYRIGHT 2002 ACS

AN 1993:472498 CAPLUS

DN 119:72498

TI Preparation of 1-alkyl-4-(arylmethyl)piperidines and their pharmaceutical

formulations as inhibitors of 5-HT reuptake

IN Damour, Dominique; Labaudiniere, Richard; Malleron, Jean Luc; Mignani, Serge

PA Rhone-Poulenc Rorer SA, Fr.

SO Fr. Demande, 43 pp.

CODEN: FRXXBL

DT Patent

LA French

FAN.CNT 1

GΙ

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
 FR 2675801 MARPAT 119:72498	A1	19921030	FR 1991-5048	19910424

AB Title piperidines I [R1 = OH, (un) substituted Ph, heterocyclyl, R4SO2NR5 (R4 = Ph, quinolyl, R5 = H, alkyl), or N(CO2R8)NHCO2R8 (R8 = alkyl); R2

CH2, CH2CH2, NH, N-alkylimino; R3 = H, halo; R4 = Ph, quinolyl; n = 1-3; partial bond represents single or double C-C bond, where for R2 = NH, it is a double bond, and for R2 = CH2CH2, it a single bond] are prepd. by condensation of an appropriate alkyl halide R1(CH2)nX with 4-(arylmethyl)piperidine. The prepn. of racemates and enantiomers of compds. I contg. at least one chiral center, and their salts with

or org. acids, are claimed. Formulations of I for medical use are given (3 examples). The compds. exhibit inhibitory activity of 5-HT recapture.

IT 148287-49-4P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation) (prepn. and acid hydrolysis of)

RN 148287-49-4 CAPLUS

CN Spiro[4H-1,2-benzothiazine-4,2'-[1,3]dioxolane], 2-[2-[4-[(5-fluoro-1H-indol-3-yl)methyl]-1-piperidinyl]ethyl]-2,3-dihydro-, 1,1-dioxide (9CI) (CA INDEX NAME)

IT 147595-42-4P 148132-68-7P 148287-50-7P

RL: SPN (Synthetic preparation); PREP (Preparation) (prepn. of, as inhibitor of 5-HT recapture)

RN 147595-42-4 CAPLUS

CN 6H-Dibenzo[c,e][1,2]thiazine, 6-[2-[4-[(5-fluoro-1H-indol-3-yl)methyl]-1-

piperidinyl]ethyl]-, 5,5-dioxide (9CI) (CA INDEX NAME)

RN 148132-68-7 CAPLUS

CN 6H-Dibenzo[c,e][1,2]thiazine, 6-[2-[4-[(5-fluoro-1H-indol-3-yl)methyl]-1-

piperidinyl]ethyl]-, 5,5-dioxide, ethanedioate (1:1) (9CI) (CA INDEX NAME)

CM 1

CRN 147595-42-4

CMF C28 H28 F N3 O2 S

CM 2

CRN 144-62-7

CMF C2 H2 O4

RN 148287-50-7 CAPLUS

CN 4H-1,2-Benzothiazin-4-one, 2-[2-[4-[(5-fluoro-1H-indol-3-yl)methyl]-1-piperidinyl]ethyl]-2,3-dihydro-, 1,1-dioxide (9CI) (CA INDEX NAME)

L9 ANSWER 16 OF 49 CAPLUS COPYRIGHT 2002 ACS

AN 1994:534056 CAPLUS

DN 121:134056

TI Synthesis of some amides of 4-hydroxy-5,7-dimethyl-2H-pyrido[3,2-e]-1,2-thiazine-2-acetic acid 1,1-dioxide

AU Malinka, W.; Deren, A.

CS Dep. Chem. Drugs, Sch. Med., Wroclaw, 50-137, Pol.

SO Pol. J. Chem. (1992), 66(12), 1953-60 CODEN: PJCHDQ; ISSN: 0137-5083

DT Journal

LA English

GI

3-Acetyl(benzoyl)-4-hydroxy-5,7-dimethyl-2H-pyrido[3,2-e]-1,2-thiazine-2-acetic acid 1,1-dioxides I (R = Me, Ph; R1 = OH) react on treatment with SOCl2 and alkylamine to yield the title amides I (R = Me, Ph; R1 = cyclohexylamino, piperidino, butylamino, allylamino) with potential antiinflammatory activity. In reaction of acid I (R = Me; R1 = OH) with primary n-alkylamines amido-enamines II (R2 = Bu, allyl, Me) were obtained unexpectedly.

IT 157253-66-2P 157253-70-8P

RL: SPN (Synthetic preparation); PREP (Preparation)
 (prepn. of)

RN 157253-66-2 CAPLUS

CN Piperidine, 1-[(3-acetyl-4-hydroxy-5,7-dimethyl-1,1-dioxido-2H-pyrido[3,2-e]-1,2-thiazin-2-yl)acetyl]- (9CI) (CA INDEX NAME)

RN 157253-70-8 CAPLUS

CN Piperidine, 1-[(3-benzoyl-4-hydroxy-5,7-dimethyl-1,1-dioxido-2H-pyrido[3,2-e]-1,2-thiazin-2-yl)acetyl]- (9CI) (CA INDEX NAME)

L9 ANSWER 17 OF 49 CAPLUS COPYRIGHT 2002 ACS

AN 1994:435514 CAPLUS

DN 121:35514

TI New indole derivatives as potent and selective serotonin uptake inhibitors

AU Mignani, Serge; Damour, Dominique; Doble, Adam; Labaudiniere, Richard; Malleron, Jean Luc; Piot, Odile; Gueremy, Claude

CS Cent. Rech. Vitry-Alfortville, Rhone-Poulenc Rorer S.A., Vitry-sur-Seine,

94403, Fr.

SO Bioorg. Med. Chem. Lett. (1993), 3(10), 1913-18 CODEN: BMCLE8; ISSN: 0960-894X

DT Journal

LA English

GI

AB A new series of serotonin uptake inhibitors is described. Indole derivs.,

e.g. I, were prepd. and exhibit potent and selective activities in a binding assay for the 5-HT uptake site and also behave like strong in vivo

serotonin uptake inhibitors.

IT 148287-50-7P

RL: SPN (Synthetic preparation); PREP (Preparation) (prepn. of, as serotonin uptake antagonist)

RN 148287-50-7 CAPLUS

CN 4H-1,2-Benzothiazin-4-one, 2-[2-[4-[(5-fluoro-1H-indol-3-yl)methyl]-1-piperidinyl]ethyl]-2,3-dihydro-, 1,1-dioxide (9CI) (CA INDEX NAME)

L9 ANSWER 15 OF 49 CAPLUS COPYRIGHT 2002 ACS

AN 1995:418701 CAPLUS

DN 123:55786

TI Studies on synthesis and biological properties of pyrazolo[4,3-c]pyrido[3,2-e]-1,2-thiazine 5,5-dioxide bearing 4-substituted-1-piperazinylpropyl moiety

AU Malinka, Wieslaw; Sieklucka-Dziuba, Maria; Rajtar-Cynke, Grazyna; Borowicz, Kinga; Kleinrok, Zdzislaw

CS Dep. Drug Chem., Wroclaw Univ. Med., Wroclaw, 50-137, Pol.

SO Farmaco (1994), 49(12), 783-92 CODEN: FRMCE8

DT Journal

LA English

GI

Х

ΙI

AB Pyrazolopyridothiazine 5,5-dioxides (I, R = Me, Ph; X = Y = CH, N; X = N,

Y = CH) and pyridothiazine 1,1-dioxides (II, R = Me, Ph; X = Y = CH, N;

= N, Y = CH) bearing 1-piperazinylpropyl substituents were synthesized. The acute toxicity and preliminary results on the CNS activity of I and

are described. A structure-activity relationship is discussed.

IT 164357-43-1P

RN 164357-43-1 CAPLUS

CN Pyrazolo[4,3-c]pyrido[3,2-e][1,2]thiazine, 1,4-dihydro-1,3,7,9-tetramethyl-

4-[3-(4-phenyl-1-piperazinyl)propyl]-, 5,5-dioxide (9CI) (CA INDEX NAME)

IT 164357-31-7P

RL: BAC (Biological activity or effector, except adverse); RCT
(Reactant);

SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation) (synthesis and CNS activity of pyrazolopyridothiazine dioxides)

RN 164357-31-7 CAPLUS

CN Ethanone, 1-[4-hydroxy-5,7-dimethyl-1,1-dioxido-2-[3-(4-phenyl-1-piperazinyl)propyl]-2H-pyrido[3,2-e]-1,2-thiazin-3-yl]- (9CI) (CA INDEX NAME)

$$\begin{array}{c|c}
N & CH_2 \\
N & Ac
\end{array}$$

IT 164357-32-8P 164357-33-9P 164357-36-2P 164357-37-3P 164357-38-4P

RL: BAC (Biological activity or effector, except adverse); SPN (Synthetic

preparation); BIOL (Biological study); PREP (Preparation)
 (synthesis and CNS activity of pyrazolopyridothiazine dioxides)

RN 164357-32-8 CAPLUS

CN Methanone, [4-hydroxy-5,7-dimethyl-1,1-dioxido-2-[3-(4-phenyl-1-piperazinyl)propyl]-2H-pyrido[3,2-e]-1,2-thiazin-3-yl]phenyl- (9CI) (CA INDEX NAME)

$$\begin{array}{c|c}
N & C & O & N \\
\hline
N & C & O & N \\
\hline
N & O & N \\
\hline
N & O & N \\
\hline
N & Me
\end{array}$$

RN 164357-33-9 CAPLUS

CN Pyrazolo[4,3-c]pyrido[3,2-e][1,2]thiazine, 2,4-dihydro-2,3,7,9-tetramethyl-

4-[3-(4-phenyl-1-piperazinyl)propyl]-, 5,5-dioxide (9CI) (CA INDEX NAME)

RN 164357-36-2 CAPLUS

CN Pyrazolo[4,3-c]pyrido[3,2-e][1,2]thiazine, 2,4-dihydro-2,3,7,9-tetramethyl-

4-[3-[4-(2-pyridinyl)-1-piperazinyl]propyl]-, 5,5-dioxide (9CI) (CA INDEX

NAME)

RN 164357-37-3 CAPLUS

CN Pyrazolo[4,3-c]pyrido[3,2-e][1,2]thiazine, 2,4-dihydro-2,3,7,9-tetramethyl-

4-[3-[4-(2-pyrimidinyl)-1-piperazinyl]propyl]-, 5,5-dioxide (9CI) (CA INDEX NAME)

RN 164357-38-4 CAPLUS

CN Pyrazolo[4,3-c]pyrido[3,2-e][1,2]thiazine, 2,4-dihydro-2,7,9-trimethyl-3-

phenyl-4-[3-(4-phenyl-1-piperazinyl)propyl]-, 5,5-dioxide (9CI) (CA INDEX

NAME)

IT 164357-34-0P 164357-35-1P 164357-39-5P 164357-40-8P

RL: SPN (Synthetic preparation); PREP (Preparation)

(synthesis and CNS activity of pyrazolopyridothiazine dioxides)

RN 164357-34-0 CAPLUS

CN Pyrazolo[4,3-c]pyrido[3,2-e][1,2]thiazine, 2,4-dihydro-2,7,9-trimethyl-3-

phenyl-4-[3-[4-(2-pyridinyl)-1-piperazinyl]propyl]-, 5,5-dioxide (9CI)
(CA INDEX NAME)

RN 164357-35-1 CAPLUS

CN Pyrazolo[4,3-c]pyrido[3,2-e][1,2]thiazine, 2,4-dihydro-2,7,9-trimethyl-3-

phenyl-4-[3-[4-(2-pyrimidinyl)-1-piperazinyl]propyl]-, 5,5-dioxide (9CI)
(CA INDEX NAME)

RN 164357-39-5 CAPLUS

CN Methanone, [4-hydroxy-5,7-dimethyl-1,1-dioxido-2-[3-[4-(2-pyridinyl)-1-piperazinyl]propyl]-2H-pyrido[3,2-e]-1,2-thiazin-3-yl]phenyl- (9CI) (CA INDEX NAME)

RN 164357-40-8 CAPLUS
CN Methanone, [4-hydroxy-5,7-dimethyl-1,1-dioxido-2-[3-[4-(2-pyrimidinyl)-1-piperazinyl]propyl]-2H-pyrido[3,2-e]-1,2-thiazin-3-yl]phenyl- (9CI) (CA INDEX NAME)

1995:998362 CAPLUS AN 124:176079 DN Preparation of heterocycles as .alpha.1c adrenergic receptor antagonists TI Huff, Joel R.; Lee, Hee-Yoon; Nerenberg, Jennie B.; Thompson, Wayne J. IN Merck and Co., Inc., USA PA PCT Int. Appl., 209 pp. SO CODEN: PIXXD2 Patent DTEnglish LΑ FAN.CNT 2 PATENT NO. KIND APPLICATION NO. 19951026 WO 1995-US4590 19950413 PΙ WO 9528397 A1 W: AM, AU, BB, BG, BR, BY, CA, CN, CZ, EE, FI, GE, HU, IS, JP, KG, KR, KZ, LK, LR, LT, LV, MD, MG, MN, MX, NO, NZ, PL, RO, RU, SG, SI, SK, TJ, TT, UA, US, UZ RW: KE, MW, SD, SZ, UG, AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE, SN, TD, TG CA 1995-2187767 CA 2187767 19951026 19950413 AA AU 9523566 19951110 AU 1995-23566 19950413 Α1 AU 688498 B2 19980312 EP 755392 **A**1 19970129 EP 1995-917565 19950413 R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LI, LU, NL, PT, SE Т2 19971202 JP 1995-527097 19950413 JP 09512016 19980602 US 1996-722001 19961001 US 5760054 Α PRAI US 1994-229276 19940414 WO 1995-US4590 19950413 os MARPAT 124:176079 GI

ANSWER 11 OF 49 CAPLUS COPYRIGHT 2002 ACS

L9

AB Title compds. such as I (R1, R2, R3, R4 = H, NO2, NH2, etc.; R5, R6, R7, R8 = H, alkyl, alkenyl, alkoxy, etc.) and II, effective testosterone reductase inhibitors useful in treatment of benign prostatic

I

hyperplasia,

were prepd. Alkylation of 1-(4-piperidinyl)-3-benzoxazolin-2-one. \mbox{HCl} with

2-(4-bromobutyl)-1,1-dioxo-1,2-benzothiazol-3(2H)-one in the presence of (i-Pr)2NEt in DMF afforded 40% I (R1-R8 = H). Title compds. are effective

at 0.001 mg/kg - 7 mg/kg per day in humans.

IT 173842-47-2P

RL: BAC (Biological activity or effector, except adverse); SPN (Synthetic

preparation); THU (Therapeutic use); BIOL (Biological study); PREP
(Preparation); USES (Uses)

(prepn. of heterocycles as .alpha.1c adrenergic receptor antagonists)

RN 173842-47-2 CAPLUS

CN Spiro[2H-indene-2,4'-piperidin]-1(3H)-one, 1'-[4-(1,1-dioxido-3-oxonaphtho[1,8-de]-1,2-thiazin-2(3H)-yl)butyl]- (9CI) (CA INDEX NAME)

L9 ANSWER 7 OF 49 CAPLUS COPYRIGHT 2002 ACS

AN 1997:257352 CAPLUS

DN 126:238385

TI Preparation of novel pyrido[3,2-e]-1,2-thiazine derivative as psychotropic

agent

IN Malinka, Wieslaw; Kleinrok, Zdzislaw; Sieklucka, Maria

PA Akademia Medyczna, Pol.

SO Pol., 3 pp.

CODEN: POXXA7

DT Patent

LA Polish

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI GI	PL 170394	В1	19961231	PL 1993-299530	19930701

AB The title compd. I, useful as psychotropic agent, was prepd. in 56% yield

Ι

by reaction of 2H-3-acetyl-4-hydroxy-5,7-dimethylpyrido[3,2-e]-1,2-thiazine 1,1-dioxide with 1-chloro-3-(4-phenyl-1-piperazinyl)propane in the presence of NaOEt in EtOH. Compd. I showed LD50 of 1753.9 mg/kg,

e.g., decreased spontaneous mobility in mice at 1/80 LD50.

IT 164357-31-7P

and,

RL: BAC (Biological activity or effector, except adverse); SPN (Synthetic

preparation); THU (Therapeutic use); BIOL (Biological study); PREP
(Preparation); USES (Uses)

(prepn. of novel pyrido[3,2-e]-1,2-thiazine deriv. as psychotropic agent)

RN 164357-31-7 CAPLUS

CN Ethanone, 1-[4-hydroxy-5,7-dimethyl-1,1-dioxido-2-[3-(4-phenyl-1-piperazinyl)propyl]-2H-pyrido[3,2-e]-1,2-thiazin-3-yl]- (9CI) (CA INDEX NAME)

L9 ANSWER 8 OF 49 CAPLUS COPYRIGHT 2002 ACS

AN 1997:257351 CAPLUS

DN 126:238384

TI Preparation of novel pyrido[3,2-e]-1,2-thiazine as psychotropic agent

IN Malinka, Wieslaw; Kleinrok, Zdzislaw; Sieklucka, Maria

PA Akademia Medyczna, Pol.

SO Pol., 4 pp.

CODEN: POXXA7

DT Patent

LA Polish

FAN.CNT 1

and,

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI GI	PL 170371	B1	19961231	PL 1993-299532	19930701

AB The title compd. I, useful as psychotropic agent, was prepd. in 60% yield

Ι

by reaction of 2H-3-benzoyl-4-hydroxy-5,7-dimethylpyrido[3,2-e]-1,2-thiazine 1,1-dioxide with 1-chloro-3-(4-phenyl-1-piperazinyl)propane in the presence of NaOEt in EtOH. Compd. I showed LD50 of > 2000 mg/kg,

e.g., decreased spontaneous mobility in mice and rats at $1/40\ \text{LD50}$. IT 164357-32-8P

RL: BAC (Biological activity or effector, except adverse); SPN (Synthetic

preparation); THU (Therapeutic use); BIOL (Biological study); PREP
(Preparation); USES (Uses)

(prepn. of novel pyrido[3,2-e]-1,2-thiazine as psychotropic agent)

RN 164357-32-8 CAPLUS

CN Methanone, [4-hydroxy-5,7-dimethyl-1,1-dioxido-2-[3-(4-phenyl-1-piperazinyl)propyl]-2H-pyrido[3,2-e]-1,2-thiazin-3-yl]phenyl- (9CI) (CA INDEX NAME)

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L9 ANSWER 9 OF 49 CAPLUS COPYRIGHT 2002 ACS
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AN 1997:134766 CAPLUS

DN 126:144283

TI Preparation of benzothiazine derivatives as serotonin-2-receptor antagonists

IN Mizuno, Akira; Shibata, Makoto; Iwamori, Tomoe; Inomata, Norio

PA Suntory Limited, Japan

SO Eur. Pat. Appl., 62 pp.

CODEN: EPXXDW

DT Patent

LA English

FAN. CNT 3

E2

as

ΓM	IN.CNI 3				
	PATENT NO.	KIND DAT	ΓE	APPLICATION NO.	DATE
ΡI	EP 749967	A1 199	961227	EP 1996-110050	19960621
	R: AT, BE, PT, SE	CH, DE, DE	K, ES, FI,	FR, GB, GR, IE, IT	, LI, LU, MC, NL,
	· · · · · · · · · · · · · · · · · · ·				
	JP 09012562	A2 199	970114	JP 1995-177976	19950622
	CA 2179679	AA 199	961223	CA 1996-2179679	19960621
PR	AI JP 1995-177976	A 199	950622		
OS GI		83			

MeO
$$Q^{1}$$

$$S_{2}$$

$$NAN$$

$$E1$$

$$E1$$

$$E2$$

$$I$$

AB The title compds. [I; Z = C(O), CH2, CH, etc.; Q1 = H, OH, halo, etc.; Q2

= OH, halo, alkyl, etc.; A = (un)substituted alkylene, alkenylene, alkynylene; Y = CH, C, N; m = 0, 1; n = 1-3; B = 0, S, C(0), etc.; E1,

II

= H, lower alkyl; D = an arom. hydrocarbon group or an arom. heterocyclic

group], having strong serotonin-2 blocking action, excellent selectivity to this action against .alpha.1 blocking action, high safety, and therefore useful as therapeutics for various circulatory diseases such

ischemic heart diseases, cerebrovascular disturbances and peripheral circulatory disturbances, were prepd. Thus, reaction of 2-(3-chloropropyl)-6-methoxy-3,4-dihydro-2H-1,2-benzothiazin-4-one 1,1-dioxide ethylene acetal with 1-(4-fluorophenyl)piperazine in the presence of NaHCO3, NaI in MeCN afforded 93% II which showed 63.0% and 62.3% (of the control) contractions of the superior mesenteric artery

and thoracic aorta of Hartley male guinea pig, resp., at 10-7 M as anti-serotonin and anti-.alpha.1 action. 186491-81-6P 186491-82-7P 186491-83-8P IT 186491-84-9P 186491-85-0P 186491-86-1P 186491-87-2P 186491-88-3P 186491-89-4P 186491-90-7P 186491-91-8P 186491-92-9P 186491-93-0P 186491-94-1P 186491-95-2P 186491-96-3P RL: BAC (Biological activity or effector, except adverse); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses) (prepn. of benzothiazine derivs. as serotonin-2-receptor antagonists) RN 186491-81-6 CAPLUS

Spiro[4H-1,2-benzothiazine-4,2'-[1,3]dioxolane], 2-[2-[4-(4-

NAME)

RN 186491-82-7 CAPLUS
CN Spiro[4H-1,2-benzothiazine-4,2'-[1,3]dioxolane], 2-[3-[4-(4-fluorophenyl)1-piperazinyl]propyl]-2,3-dihydro-5-methoxy-, 1,1-dioxide (9CI) (CA INDEX
NAME)

RN 186491-83-8 CAPLUS
CN Phenol, 4-[4-[3-(5-methoxy-1,1-dioxidospiro[4H-1,2-benzothiazine-4,2'-[1,3]dioxolan]-2(3H)-yl)propyl]-1-piperazinyl]- (9CI) (CA INDEX NAME)

RN 186491-84-9 CAPLUS

CN Methanone, (4-fluorophenyl) [1-[3-(5-methoxy-1,1-dioxidospiro[4H-1,2-benzothiazine-4,2'-[1,3]dioxolan]-2(3H)-yl)propyl]-4-piperidinyl]- (9CI) (CA INDEX NAME)

RN 186491-85-0 CAPLUS

CN Spiro[4H-1,2-benzothiazine-4,2'-[1,3]dioxolane], 5-chloro-2-[3-[4-(4-fluorophenyl)-1-piperazinyl]propyl]-2,3-dihydro-, 1,1-dioxide (9CI) (CA INDEX NAME)

RN 186491-86-1 CAPLUS

CN Phenol, 4-[4-[3-(5-chloro-1,1-dioxidospiro[4H-1,2-benzothiazine-4,2'-[1,3]dioxolan]-2(3H)-yl)propyl]-1-piperazinyl]- (9CI) (CA INDEX NAME)

RN 186491-87-2 CAPLUS

CN Spiro[4H-1,2-benzothiazine-4,2'-[1,3]dioxolane], 2-[3-[4-(4-1)]

fluorophenyl) -

1-piperazinyl]propyl]-2,3-dihydro-6-methoxy-, 1,1-dioxide (9CI) (CA INDEX

NAME)

RN 186491-88-3 CAPLUS

CN Methanone, (4-fluorophenyl)[1-[3-(6-methoxy-1,1-dioxidospiro[4H-1,2-benzothiazine-4,2'-[1,3]dioxolan]-2(3H)-yl)propyl]-4-piperidinyl]- (9CI) (CA INDEX NAME)

RN 186491-89-4 CAPLUS

CN Spiro[4H-1,2-benzothiazine-4,2'-[1,3]dioxolane], 6-chloro-2-[3-[4-(4-fluorophenyl)-1-piperazinyl]propyl]-2,3-dihydro-, 1,1-dioxide (9CI) (CA INDEX NAME)

RN 186491-90-7 CAPLUS

CN Methanone, [1-[3-(6-chloro-1,1-dioxidospiro[4H-1,2-benzothiazine-4,2'-[1,3]dioxolan]-2(3H)-yl)propyl]-4-piperidinyl](4-fluorophenyl)- (9CI)

(CA INDEX NAME)

RN 186491-91-8 CAPLUS

CN Spiro[4H-1,2-benzothiazine-4,2'-[1,3]dioxolane], 2-[3-[4-(4-fluorophenyl)-

1-piperazinyl]propyl]-2,3-dihydro-7-methoxy-, 1,1-dioxide (9CI) (CA INDEX

NAME)

RN 186491-92-9 CAPLUS

CN Methanone, (4-fluorophenyl)[1-[3-(7-methoxy-1,1-dioxidospiro[4H-1,2-benzothiazine-4,2'-[1,3]dioxolan]-2(3H)-yl)propyl]-4-piperidinyl]- (9CI) (CA INDEX NAME)

RN 186491-93-0 CAPLUS

CN Spiro[4H-1,2-benzothiazine-4,2'-[1,3]dioxolane], 7-chloro-2-[3-[4-(4-fluorophenyl)-1-piperazinyl]propyl]-2,3-dihydro-, 1,1-dioxide (9CI) (CA INDEX NAME)

RN 186491-94-1 CAPLUS

CN Methanone, [1-[3-(7-chloro-1,1-dioxidospiro[4H-1,2-benzothiazine-4,2'-[1,3]dioxolan]-2(3H)-yl)propyl]-4-piperidinyl](4-fluorophenyl)- (9CI)

(CA INDEX NAME)

RN 186491-95-2 CAPLUS

CN Spiro[4H-1,2-benzothiazine-4,2'-[1,3]dithiolane], 2-[3-[4-(4-

fluorophenyl)-

1-piperazinyl]propyl]-2,3-dihydro-5-methoxy-, 1,1-dioxide (9CI) (CA INDEX

NAME)

RN 186491-96-3 CAPLUS

CN Spiro[4H-1,2-benzothiazine-4,2'-[1,3]dithiolane], 5-chloro-2-[3-[4-(4-fluorophenyl)-1-piperazinyl]propyl]-2,3-dihydro-, 1,1-dioxide (9CI) (CA INDEX NAME)

L9 ANSWER 6 OF 49 CAPLUS COPYRIGHT 2002 ACS

AN 1998:74309 CAPLUS

DN 128:114933

TI Synthesis of antiinflammatory novel 3-pyrrolidinylcarbonyl-1,2-benzothiazine derivatives

AU Park, Myung-Sook

CS Coll. Pharm., Duksung Women's Univ., Seoul, 132-714, S. Korea

SO Yakhak Hoechi (1997), 41(6), 724-729

CODEN: YAHOA3; ISSN: 0513-4234

PB Pharmaceutical Society of Korea

DT Journal

LA Korean

OS CASREACT 128:114933

GI

$$Q = \begin{array}{c} \text{MeO} \\ \\ \text{N} \\ \text{CO}_2\text{H} \end{array}$$

AB New 7-Halo-4-hydroxy-2-allyl-3-(4-methoxy-2-carboxy-1-pyrrolidinyl)carbonyl-2H-1,2-benzothiazine 1,1-dioxide derivs. (I; R = Q;

X = Br, Cl) were synthesized through the condensation of 7-halo-4-hydroxy-2-allyl-1,2-benzothiazine-3-carboxylic acid Me ester 1,1-dioxide I (R = OMe; X = same as above) with .gamma.-methoxy L-proline

(Q-OH).

IT 201421-93-4P 201421-94-5P

RL: SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(prepn. of antiinflammatory (pyrrolidinylcarbonyl) benzothiazine derivs.

by condensation of Me halohydroxyallylbenzothiazinecarboxylate 1,1-dioxide with .gamma.-methoxy L-proline)

RN 201421-93-4 CAPLUS

CN L-Proline, 1-[[7-bromo-4-hydroxy-1,1-dioxido-2-(2-propenyl)-2H-1,2-benzothiazin-3-yl]carbonyl]-5-methoxy-, (5R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN

201421-94-5 CAPLUS L-Proline, 1-[[7-chloro-4-hydroxy-1,1-dioxido-2-(2-propenyl)-2H-1,2-benzothiazin-3-yl]carbonyl]-5-methoxy-, (5R)- (9CI) (CA INDEX NAME) CN

Absolute stereochemistry.

L9 ANSWER 5 OF 49 CAPLUS COPYRIGHT 2002 ACS

AN 1998:392146 CAPLUS

DN 129:54361

TI Preparation of benzisothiazolones and analogs as .alpha.1C-adrenergic receptor antagonists

IN Huff, Joel R.; Lee, Hee-yoon; Nerenberg, Jennie B.; Thompson, Wayne J.;
Bell, Ian M.

PA Merck and Co., Inc., USA

SO U.S., 57 pp. Cont.-in-part of U. S. Ser. No. 229,276, abandoned. CODEN: USXXAM

DT Patent

LA English

FAN.CNT 2

GI

PAN.	CMI	2																
	PATENT NO.					ND	DATE		A	PPLI	CATI	ON NO	ο.	DATE				
PI	US	5760	054		Α		19980602			U:	s 19	96-7	2200	19961001				
	WO	95283	397		A	1	19951026			WO 1995-US4590			0	19950413				
		W:	AM,	ΑU,	BB,	BG,	BR,	BY,	CA,	CN,	CZ,	EE,	FI,	GE,	HU,	IS,	JP,	KG,
			KR,	ΚZ,	LK,	LR,	LT,	LV,	MD,	MG,	MN,	MX,	NO,	ΝZ,	PL,	RO,	RU,	SG,
			SI,	SK,	TJ,	TT,	UA,	US,	UZ									
		RW:	ΚE,	MW,	SD,	SZ,	UG,	ΑT,	BE,	CH,	DE,	DK,	ES,	FR,	GB,	GR,	ΙE,	IT,
			LU,	MC,	NL,	PT,	SE,	BF,	ВJ,	CF,	CG,	CI,	CM,	GΑ,	GN,	ML,	MR,	NE,
			SN,	TD,	ΤG													
PRAI	US	1994	-229	276			1994	0413										
	WO	1995	-US4	590			1995	0413										
os	MAF	RPAT :	129:	5436	1													

AB The invention relates to the claimed title compds. I [n = 3-5; B = C or N;

R1, R2, R3, R4 = H, halo, NO2, NH2, (un)substituted alkyl, alkoxy, aryl, heteroaryl, etc.; R5, R6, R7, R8 = H, alkyl, alkenyl, alkoxy; Z = O, S, CH2, NH, NMe] and analogs. Also disclosed are the synthesis and use of the compds. as selective .alpha.1C-adrenergic receptor antagonists. The primary application of the compds. is in the treatment of benign

Ι

prostatic

hypertrophy (BPH). The compds. selectively relax smooth muscle tissue enriched in the .alpha.1C receptor subtype without inducing orthostatic hypotension. The compds. provide acute relief of BPH by permitting less hindered urine flow. I and analogs are also useful in combination with human 5.alpha.-reductase inhibitors, providing both acute and chronic relief from the effects of BPH. Approx. 130 specific invention compds. are disclosed. The cloning and use of a cDNA for a human .alpha.1C adrenoceptor in an in vitro assay is described. For instance, alkylation

of 1-(4-piperidiny1)-3-benzoxazolin-2-one.HCl (prepd. in 4 steps) with 2-(4-bromobutyl)-1,1-dioxido-1,2-benzisothiazol-3(2H)-one in the presence

of (i-Pr)2NEt in DMF gave 40% title compd. II. Selected compds. showed nanomolar or subnanomolar affinity for human .alpha.1C receptor subtype while showing 30-fold lower affinity for human .alpha.1A and .alpha.1B subtypes (no data).

IT 173842-47-2P

RL: BAC (Biological activity or effector, except adverse); SPN (Synthetic

preparation); THU (Therapeutic use); BIOL (Biological study); PREP
(Preparation); USES (Uses)

(prepn. of benzisothiazolones and analogs as .alpha.1C-adrenergic antagonists)

RN 173842-47-2 CAPLUS

CN Spiro[2H-indene-2,4'-piperidin]-1(3H)-one, 1'-[4-(1,1-dioxido-3-oxonaphtho[1,8-de]-1,2-thiazin-2(3H)-yl)butyl]- (9CI) (CA INDEX NAME)

L9 ANSWER 3 OF 49 CAPLUS COPYRIGHT 2002 ACS

AN 1999:449035 CAPLUS

DN 131:116257

TI Preparation of pyrrole sulfonamide derivatives as serotonin-2 receptor antagonists

IN Mizuno, Akira; Shibata, Makoto; Iwamori, Chie; Fukami, Harukazu; Inomata, Norio

PA Suntory, Ltd., Japan

SO Jpn. Kokai Tokkyo Koho, 31 pp.

CODEN: JKXXAF

DT Patent

LA Japanese

FAN.CNT 1

LAIN.		_	170		7/ 71		D.3.M.D.			70.	DDT T	a a m T	OM M	^	D N III III				
	PATENT NO.			KTI	עא	DATE			APPLICATION NO.					DATE					
PΙ		1119				_									1997				
	WO	9933	840		A2	2	1999	0708		W	19	98-J	P595	4	1998	1225			
	WO 9933840				A:	3	19990910												
		W:	ΑU,	CA,	CN,	HU,	KR,	US											
		RW:	AT,	BE,	CH,	CY,	DE,	DK,	ES,	FI,	FR,	GB,	GR,	ΙE,	IT,	LU,	MC,	NL,	
			PT,	SE															
	AU	9916	906		A1 19990719			AU 1999-16906					19981225						
	EP	9700	88		Αź	A2 2000011		0112		EP 1998-961598				В	19981225				
		R:	ΑT,	BE,	CH,	DE,	DK,	ES,	FR,	GB,	GR,	IT,	LI,	LU,	NL,	SE,	MC,	PT,	
			ΙE,	FI															
	US	6271	223		В.	1	2001	0807		U:	3 19	99-3	6784:	l	1999	0826			
PRAI	JP	1997	-366	756	Α		1997	1226											
	WO	1998	-JP59	954	W		1998	1225											
os	MAR	PAT	131:	1162	57														
GI																			

$$Q = N$$
 $D = X$
 F

Ι

AB Title compds. [I; A = CH, NMe; B = NMe, CH; dotted bonds = single, double; m = 0, 1; D = CH, N; X = bond, CO; Y-Z = :0, :NOH; Y = H; Z = OH; R = CH2CH2CH2Q] and their salts are prepd. as serotonin 2 receptor antagonists on treatment of circulatory system disease with low side effect. Thus, the title compd. I (A = CH; B = NMe; m = 1; D = N; Y-Z = :0; X = bond; dotted bonds were single and double related to B) was prepd. and tested for anti-5-HT and anti-.alpha.1 actions in guinea pig.

IT 232619-90-8P

RL: BAC (Biological activity or effector, except adverse); RCT (Reactant); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation) (prepn. of pyrrolothiazinones and pyrrolothiazepinones as serotonin-2 receptor antagonists)

RN 232619-90-8 CAPLUS

CN Pyrrolo[2,3-e]-1,2-thiazin-4(5H)-one, 2-[3-[4-(4-fluorophenyl)-1-piperazinyl]propyl]-2,3-dihydro-5-methyl-, 1,1-dioxide (9CI) (CA INDEX

NAME)

IT 232619-94-2P 232619-95-3P 232619-98-6P

RL: BAC (Biological activity or effector, except adverse); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation) (prepn. of pyrrolothiazinones and pyrrolothiazepinones as serotonin-2 receptor antagonists)

RN 232619-94-2 CAPLUS

CN Pyrrolo[2,3-e]-1,2-thiazin-4(5H)-one, 2-[3-[4-(4-fluorophenyl)-1-piperazinyl]propyl]-2,3-dihydro-5-methyl-, oxime, 1,1-dioxide (9CI) (CAINDEX NAME)

RN 232619-95-3 CAPLUS

CN Pyrrolo[2,3-e]-1,2-thiazin-4(5H)-one, 2-[3-[4-(4-fluorobenzoyl)-1-piperidinyl]propyl]-2,3-dihydro-5-methyl-, 4-oxime, 1,1-dioxide (9CI) (CA INDEX NAME)

RN 232619-98-6 CAPLUS

CN Pyrrolo[2,3-e]-1,2-thiazin-4-ol, 2-[3-[4-(4-fluorophenyl)-1-piperazinyl]propyl]-2,3,4,5-tetrahydro-5-methyl-, 1,1-dioxide (9CI) (CA INDEX NAME)

L9 ANSWER 2 OF 49 CAPLUS COPYRIGHT 2002 ACS

AN 2000:395926 CAPLUS

DN 133:129514

TI 2H-Thieno[3,2-e]- and [2,3-e]-1,2-thiazine-6-sulfonamide 1,1-dioxides as ocular hypotensive agents: synthesis, carbonic anhydrase inhibition and evaluation in the rabbit

AU Chen, H.-H.; Gross, S.; Liao, J.; McLaughlin, M.; Dean, T.; Sly, W. S.; May, J. A.

CS Ophthalmic Products Research, Alcon Research, Ltd., Fort Worth, TX, 76134,

USA

SO Bioorganic & Medicinal Chemistry (2000), 8(5), 957-975 CODEN: BMECEP; ISSN: 0968-0896

PB Elsevier Science Ltd.

DT Journal

LA English

AB Novel non-chiral 2H-thieno[3,2-e]- and [2,3-e]-1,2-thiazine-6-sulfonamide

1,1-dioxides were synthesized for evaluation as potential candidates for the treatment of glaucoma. All of the compds. prepd. were potent high affinity inhibitors of human carbonic anhydrase II, Ki<0.5 nM. Addnl., inhibition of recombinant human carbonic anhydrase IV was detd. for selected compds.; these were shown to be moderate to potent inhibitors

of

this isoenzyme with IC50 values ranging from 4.25 to 73.6 nM. Of the compds. evaluated for their ability to lower intraocular pressure in naturally hypertensive Dutch-belted rabbits, several showed significant efficacy (>20% decrease) in this model following topical ocular administration.

IT 171272-89-2P

RL: BAC (Biological activity or effector, except adverse); PRP (Properties); RCT (Reactant); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(thieno and thiazine sulfonamide dioxides as ocular hypotensive agents:

synthesis and carbonic anhydrase inhibition)

RN 171272-89-2 CAPLUS

CN 2H-Thieno[3,2-e]-1,2-thiazine-6-sulfonamide, 2-[(4-methoxyphenyl)methyl]-3-

(4-morpholinylmethyl)-, 1,1-dioxide, monohydrochloride (9CI) (CA INDEX NAME)

171272-69-8P 171272-71-2P 171272-77-8P IT 171272-78-9P 171272-80-3P 171272-82-5P 171272-83-6P 171272-84-7P 171272-87-0P 171272-91-6P 171273-12-4P 171273-18-0P 171273-96-4P 286958-28-9P 286958-30-3P 286958-32-5P 286958-33-6P 286958-34-7P 286958-35-8P RL: BAC (Biological activity or effector, except adverse); PRP (Properties); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses) (thieno and thiazine sulfonamide dioxides as ocular hypotensive agents: synthesis and carbonic anhydrase inhibition) RN 171272-69-8 CAPLUS 2H-Thieno[3,2-e]-1,2-thiazine-6-sulfonamide, 2-[2-(4-morpholinyl)ethyl]-CN 1,1-dioxide, monohydrochloride (9CI) (CA INDEX NAME)

● HCl

RN 171272-71-2 CAPLUS
CN 2H-Thieno[3,2-e]-1,2-thiazine-6-sulfonamide, 2-methyl-3-(4-morpholinylmethyl)-, 1,1-dioxide, monohydrochloride (9CI) (CA INDEX NAME)

● HCl

RN 171272-77-8 CAPLUS
CN Piperazine, 1-acetyl-4-[2-[6-(aminosulfonyl)-1,1-dioxido-2H-thieno[3,2-e]1,2-thiazin-2-yl]ethyl]- (9CI) (CA INDEX NAME)

RN 171272-78-9 CAPLUS

CN 2H-Thieno[3,2-e]-1,2-thiazine-6-sulfonamide, 2-(3-methoxypropyl)-3-(4-morpholinylmethyl)-, 1,1-dioxide, monohydrochloride (9CI) (CA INDEX NAME)

$$\begin{array}{c|c}
N & CH_2 \\
MeO & (CH_2)_3
\end{array}$$

● HCl

RN 171272-80-3 CAPLUS

CN 2H-Thieno[3,2-e]-1,2-thiazine-6-sulfonamide, 3-(4-morpholinylmethyl)-2-propyl-, 1,1-dioxide, monohydrochloride (9CI) (CA INDEX NAME)

$$\begin{array}{c|c}
 & O \\
 & O \\$$

● HCl

RN 171272-82-5 CAPLUS

CN 2H-Thieno[3,2-e]-1,2-thiazine-6-sulfonamide, 2-(cyclopropylmethyl)-3-(4-morpholinylmethyl)-, 1,1-dioxide, monohydrochloride (9CI) (CA INDEX NAME)

● HCl

RN 171272-83-6 CAPLUS
CN 2H-Thieno[3,2-e]-1,2-thiazine-6-sulfonamide, 3-(4-morpholinylmethyl)-2(2propenyl)-, 1,1-dioxide (9CI) (CA INDEX NAME)

RN 171272-84-7 CAPLUS
CN 2H-Thieno[3,2-e]-1,2-thiazine-6-sulfonamide, 2-ethyl-3-(4-morpholinylmethyl)-, 1,1-dioxide, monohydrochloride (9CI) (CA INDEX NAME)

● HCl

RN 171272-87-0 CAPLUS
CN 2H-Thieno[3,2-e]-1,2-thiazine-6-sulfonamide, 2-[4-(4-morpholinyl)-2-butenyl]-, 1,1-dioxide, monohydrochloride (9CI) (CA INDEX NAME)

● HCl

RN 171272-91-6 CAPLUS

CN 2H-Thieno[3,2-e]-1,2-thiazine-6-sulfonamide, 2-(1-methylethyl)-3-(4-morpholinylmethyl)-, 1,1-dioxide (9CI) (CA INDEX NAME)

RN 171273-12-4 CAPLUS

CN 2H-Thieno[3,2-e]-1,2-thiazine-6-sulfonamide, 2-(3-hydroxyphenyl)-3-(4-morpholinylmethyl)-, 1,1-dioxide (9CI) (CA INDEX NAME)

RN 171273-18-0 CAPLUS

CN 2H-Thieno[3,2-e]-1,2-thiazine-6-sulfonamide, 2-(3-methoxyphenyl)-3-(4-morpholinylmethyl)-, 1,1-dioxide, monohydrochloride (9CI) (CA INDEX NAME)

HCl

RN 171273-96-4 CAPLUS

CN 2H-Thieno[3,2-e]-1,2-thiazine-6-sulfonamide, 2-(2-methoxyethyl)-3-(4-morpholinylmethyl)-, 1,1-dioxide (9CI) (CA INDEX NAME)

RN 286958-28-9 CAPLUS

CN 2H-Thieno[3,2-e]-1,2-thiazine-6-sulfonamide, 2-cyclohexyl-3-(4-morpholinylmethyl)-, 1,1-dioxide (9CI) (CA INDEX NAME)

$$\begin{array}{c|c}
N & CH2 \\
\hline
N & S \\
\hline
N & S
\end{array}$$

RN 286958-30-3 CAPLUS

CN 2H-Thieno[3,2-e]-1,2-thiazine-6-sulfonamide, 3-(1H-imidazol-1-ylmethyl)-2-

(3-methoxypropyl)-, 1,1-dioxide, monohydrochloride (9CI) (CA INDEX NAME)

● HCl

RN 286958-32-5 CAPLUS

CN 2H-Thieno[3,2-e]-1,2-thiazine-6-sulfonamide, 2-(3,4-dimethoxyphenyl)-3-(4-

morpholinylmethyl)-, 1,1-dioxide, monohydrochloride (9CI) (CA INDEX NAME)

● HCl

RN 286958-33-6 CAPLUS

CN 2H-Thieno[3,2-e]-1,2-thiazine-6-sulfonamide, 3-(4-morpholinylmethyl)-2-

[4- (4-morpholinyl)phenyl]-, 1,1-dioxide, monohydrochloride (9CI) (CA INDEX NAME)

● HCl

RN 286958-34-7 CAPLUS

CN 2H-Thieno[3,2-e]-1,2-thiazine-6-sulfonamide, 2-(3-hydroxypropyl)-3-(4-morpholinylmethyl)-, 1,1-dioxide (9CI) (CA INDEX NAME)

RN 286958-35-8 CAPLUS

CN 2H-Thieno[2,3-e]-1,2-thiazine-6-sulfonamide, 2-methyl-3-(4-morpholinylmethyl)-, 1,1-dioxide (9CI) (CA INDEX NAME)

IT 171273-55-5P 171273-60-2P 171273-66-8P 171273-67-9P 286958-36-9P 286958-84-7P 286958-88-1P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation) (thieno and thiazine sulfonamide dioxides as ocular hypotensive agents:

synthesis and carbonic anhydrase inhibition)

RN 171273-55-5 CAPLUS

CN Piperazine, 1-acetyl-4-[2-[6-[[(1,1-dimethylethyl)amino]sulfonyl]-1,1-dioxido-2H-thieno[3,2-e]-1,2-thiazin-2-yl]ethyl]- (9CI) (CA INDEX NAME)

RN 171273-60-2 CAPLUS

CN 2H-Thieno[3,2-e]-1,2-thiazine, 2-(3-methoxypropyl)-3-(4-morpholinylmethyl)-

, 1,1-dioxide (9CI) (CA INDEX NAME)

RN 171273-66-8 CAPLUS

CN 2H-Thieno[3,2-e]-1,2-thiazine-6-sulfonamide, N-(1,1-dimethylethyl)-2-[4-(4-

morpholinyl)-2-butenyl]-, 1,1-dioxide (9CI) (CA INDEX NAME)

RN 171273-67-9 CAPLUS

CN 2H-Thieno[3,2-e]-1,2-thiazine, 2-[(4-methoxyphenyl)methyl]-3-(4-morpholinylmethyl)-, 1,1-dioxide (9CI) (CA INDEX NAME)

RN 286958-36-9 CAPLUS

CN 2H-Thieno[3,2-e]-1,2-thiazine-6-sulfonamide, N-(1,1-dimethylethyl)-2-[2-(4-

morpholinyl)ethyl]-, 1,1-dioxide (9CI) (CA INDEX NAME)

RN 286958-84-7 CAPLUS

CN 2H-Thieno[3,2-e]-1,2-thiazine, 2-methyl-3-(4-morpholinylmethyl)-, 1,1-dioxide (9CI) (CA INDEX NAME)

RN 286958-88-1 CAPLUS

CN 2H-Thieno[3,2-e]-1,2-thiazine-6-sulfonamide, N-(1,1-dimethylethyl)-2-(3-methoxyphenyl)-3-(4-morpholinylmethyl)-, 1,1-dioxide (9CI) (CA INDEX NAME)

RE.CNT 25 THERE ARE 25 CITED REFERENCES AVAILABLE FOR THIS RECORD ALL CITATIONS AVAILABLE IN THE RE FORMAT

```
ANSWER 1 OF 12 CAPLUS COPYRIGHT 2002 ACS
L4
AN
     2002:31419 CAPLUS
     136:85830
DN
     Preparation of bicyclic lactams and sulfonamides as 5-HT1A agonists
ΤI
IN
     Steiner, Gerd; Schellhaas, Kurt; Szabo, Laszlo; Behl, Berthold;
     Garcia-Ladona, Francisco Javier; Unger, Liliane
PΑ
     Knoll Gmbh, Germany
SO
     PCT Int. Appl., 39 pp.
     CODEN: PIXXD2
DT
     Patent
LΑ
     German
FAN.CNT 1
     PATENT NO.
                      KIND
                            DATE
                                           APPLICATION NO.
PΙ
     WO 2002002529
                       A1
                            20020110
                                           WO 2001-EP7571
                                                             20010702
         W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN,
             CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH,
             GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR,
             LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT,
             RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US,
             UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM
         RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY,
             DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF,
             BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG
     DE 10031391
                       A1
                            20020207
                                           DE 2000-10031391 20000703
                            20000703
PRAI DE 2000-10031391
                       Α
     MARPAT 136:85830
OS
GΙ
AΒ
     Title compds. [I; the ring including NA can be a 5-7 membered ring
     contg. O, S, or double bond; A = CO, SO2; X = N; Y = CH2, CH2CH2,
     (CH2)3, CH2CH; Z = N, C, CH; n = 2-4; R1 = H, halo, alkyl, CF3, OH,
     alkoxy, amino; R2 = (substituted) (anellated) Ph, pyridyl, pyrazinyl]
     and salts thereof, were prepd. Thus, isoquinoline in DMF was stirred
```

with NaH for 30 min. followed by addn. of 1-[4-(2-chloroethyl)-1piperazinyl]isoquinoline (prepn. given) and stirring for 2 h at 80.degree. to give 82% 2-[2-(4-(1-isoquinoliny1)-1-piperaziny1)ethy1]-1(2H)-isoquinoline.2HCl.2H2O. Tested I showed affinity for the 5-HT1A receptor with Ki = 0.1-5.4 nM in HEK 293 cells.

ΙT 387399-39-5P

RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses) (prepn. of bicyclic lactams and sulfonamides as 5-HT1A agonists)

RN 387399-39-5 CAPLUS

CN 2H-1,2-Benzothiazine, 3,4-dihydro-2-[2-[4-(1-isoquinolinyl)-1-isoquinolinyl)]piperazinyl]ethyl]-, 1,1-dioxide, dihydrochloride (9CI) (CA INDEX NAME)

●2 HCl

RE.CNT 16 THERE ARE 16 CITED REFERENCES AVAILABLE FOR THIS RECORD ALL CITATIONS AVAILABLE IN THE RE FORMAT

102e?

L4 ANSWER 2 OF 12 CAPLUS COPYRIGHT 2002 ACS

AN 1999:152289 CAPLUS

DN 130:196660

TI Benzothiazine derivatives.

IN Mizuno, Akira; Shibata, Makoto; Iwamori, Tomoe; Inomata, Norio

PA Suntory Limited, Japan

SO U.S., 60 pp., Cont.-in-part of U.S. Ser. No. 507,239.

CODEN: USXXAM

DT Patent

LA English

FAN.CNT 3

FAN.	CNT 3				
	PATENT NO.	KIND I	DATE	APPLICATION NO.	DATE
PI	US 5874429	A 1	19990223	US 1996-669615	19960624
	WO 9518117	A1 1	19950706	WO 1994-JP2194	19941222
	W: AU, CA,	CN, JP,	KR, US		
	RW: AT, BE,	CH, DE,	DK, ES, FR,	GB, GR, IE, IT, LU	, MC, NL, PT, SE
	JP 09012562	A2 1	19970114	JP 1995-177976	19950622
	US 6001827	A 1	19991214	US 1998-192287	19981116
	US 6316442	B1 2	20011113	US 1999-379853	19990824
PRAI	JP 1993-345865	A 1	19931224		
	WO 1994-JP2194	W 1	19941222		
	JP 1995-177976	A 1	19950622		
	US 1995-507239	A2 1	19950824		
	US 1996-669615	A3 1	19960624		
	US 1998-192287	A3 1	19981116		
os	MARPAT 130:1966	60			
GI					

$$\underbrace{\delta_{2}^{N}(CH_{2})}_{N} \underbrace{3N}_{N} \underbrace{N}_{I} \underbrace{\delta_{2}^{N}(CH_{2})}_{S_{2}} \underbrace{3C1}_{II}$$

AB Benzothiazine derivs. such as I were prepd. as serotonin-2 and .alpha.1 blockers. Thus, 1 mmol of II, 1 mmol of 1-(2-fluorophenyl)piperazine hydrochloride, 4 mmol of NaHCO3, and 2 mmol of NaI were refluxed in 15 mL

of MeCN for 18 h to give a 50% yield of I. In tests of anti-serotonin activity in the superior mesenteric artery of guinea pigs, I at 10-7 and 10-6 M lowered contractions to 38.3 and 7.5%, resp., of control (contractions induced by 10-5 M serotonin).

IT 170631-53-5P 170631-74-0P 170631-75-1P

220716-37-0P 220716-38-1P

RL: BAC (Biological activity or effector, except adverse); BSU (Biological $\,$

study, unclassified); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation)

(benzothiazine derivs. as serotonin-2 blockers)

RN 170631-53-5 CAPLUS

CN 2H-1,2-Benzothiazine, 2-[3-[4-(4-fluorophenyl)-1-piperazinyl]propyl]-

3,4dihydro-4,4-dimethoxy-, 1,1-dioxide (9CI) (CA INDEX NAME)

RN 170631-74-0 CAPLUS

CN Methanone, [1-[3-(3,4-dihydro-4-hydroxy-1,1-dioxido-2H-1,2-benzothiazin-2-

yl)propyl]-4-piperidinyl](4-fluorophenyl)- (9CI) (CA INDEX NAME)

RN 170631-75-1 CAPLUS

CN 2H-1,2-Benzothiazin-4-ol, 2-[3-[4-(4-fluorophenyl)-1-piperazinyl]propyl]-

3,4-dihydro-, 1,1-dioxide (9CI) (CA INDEX NAME)

RN 220716-37-0 CAPLUS

CN 2H-1,2-Benzothiazine, 2-[3-[4-(4-fluorophenyl)-1-piperazinyl]propyl]-4-methoxy-, 1,1-dioxide, dihydrochloride (9CI) (CA INDEX NAME)

RN 220716-38-1 CAPLUS
CN 2H-1,2-Benzothiazine, 2-[3-[4-(4-fluorophenyl)-1-piperazinyl]propyl]3,4dihydro-4-methoxy-, 1,1-dioxide, dihydrochloride (9CI) (CA INDEX NAME)

●2 HCl

IT 170631-68-2P
 RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation);
RACT
 (Reactant or reagent)
 (benzothiazine derivs. as serotonin-2 blockers)
RN 170631-68-2 CAPLUS
CN 4H-1,2-Benzothiazin-4-one, 2-[3-[4-(4-fluorophenyl)-1-piperazinyl]propyl] 2,3-dihydro-, 1,1-dioxide (9CI) (CA INDEX NAME)

RN 170631-57-9 CAPLUS

CN 2H-1,2-Benzothiazine, 4-ethoxy-2-[3-[4-(4-fluorophenyl)-1-piperazinyl]propyl]-3,4-dihydro-, 1,1-dioxide (9CI) (CA INDEX NAME)

RN 170631-58-0 CAPLUS

CN Phenol, 4-[4-[3-(3,4-dihydro-4-methoxy-1,1-dioxido-2H-1,2-benzothiazin-

2yl)propyl]-1-piperazinyl]- (9CI) (CA INDEX NAME)

RN 170631-69-3 CAPLUS

CN 4H-1,2-Benzothiazin-4-one, 2,3-dihydro-2-[3-(4-phenyl-1-piperazinyl)propyl]-, 1,1-dioxide (9CI) (CA INDEX NAME)

RN 170631-70-6 CAPLUS

CN 4H-1,2-Benzothiazin-4-one, 2-[3-[4-(4-fluorobenzoyl)-1-piperidinyl]propyl]-

2,3-dihydro-, 1,1-dioxide (9CI) (CA INDEX NAME)

RN 170631-71-7 CAPLUS

CN 4H-1,2-Benzothiazin-4-one, 2,3-dihydro-2-[3-(4-phenyl-1-piperazinyl)propyl]-, oxime, 1,1-dioxide (9CI) (CA INDEX NAME)

RN 170631-72-8 CAPLUS

CN 4H-1,2-Benzothiazin-4-one, 2-[3-[4-(4-fluorobenzoyl)-1-piperidinyl]propyl]-

2,3-dihydro-, 4-oxime, 1,1-dioxide (9CI) (CA INDEX NAME)

RN 170631-73-9 CAPLUS

CN 4H-1,2-Benzothiazin-4-one, 2-[3-[4-(4-fluorophenyl)-1-piperazinyl]propyl]-

2,3-dihydro-, oxime, 1,1-dioxide (9CI) (CA INDEX NAME)

RN 170631-76-2 CAPLUS

CN 2H-1,2-Benzothiazine, 2-[3-[4-(4-fluorophenyl)-1-piperazinyl]propyl]-, 1,1-dioxide (9CI) (CA INDEX NAME)

,

RN 170631-77-3 CAPLUS

CN 2H-1,2-Benzothiazine, 2-[3-[4-(4-fluorophenyl)-1-piperazinyl]propyl]-3,4-

dihydro-, 1,1-dioxide (9CI) (CA INDEX NAME)

RN 220716-39-2 CAPLUS

CN 2H-1,2-Benzothiazine, 2-[3-[4-(4-fluorophenyl)-1-piperazinyl]propyl]-3,4-dihydro-4-(phenylmethoxy)-, 1,1-dioxide, dihydrochloride (9CI) (CA INDEX NAME)

●2 HCl

RN 220716-42-7 CAPLUS

CN 2H-1,2-Benzothiazine, 4,4-bis(ethylthio)-2-[3-[4-(4-fluorophenyl)-1-piperazinyl]propyl]-3,4-dihydro-, 1,1-dioxide, dihydrochloride (9CI) (CA INDEX NAME)

●2 HC1

RE.CNT 17 THERE ARE 17 CITED REFERENCES AVAILABLE FOR THIS RECORD ALL CITATIONS AVAILABLE IN THE RE FORMAT

```
AN
     1995:996307 CAPLUS
DN
     124:146182
TI
     Preparation of benzothiazine derivatives for inhibiting dysuria
IN
     Masaki, Mitsuo; Miyake, Norihisa; Tendo, Atsushi; Ishida, Michiko;
     Shinozaki, Atsuhiko; Nomura, Yutaka; Goto, Yasunori
     Nippon Chemiphar Co., Ltd., Japan
PA
     PCT Int. Appl., 108 pp.
SO
     CODEN: PIXXD2
DT
     Patent
     Japanese
LΑ
FAN.CNT 1
                                          APPLICATION NO. DATE
     PATENT NO.
                            DATE
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     WO 9526959
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                                          WO 1995-JP632
                                                           19950331
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             SK, TJ, TT, UA, US, UZ, VN
         RW: KE, MW, SD, SZ, UG, AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT,
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             SN, TD, TG
     JP 07278125
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                                          AU 1995-20849
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                                          JP 1995-100505
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                                          EP 1995-913402
     EP 753514
                                                           19950331
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                       Α
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                                          AU 1998-97203
                      A1
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                                                           19981218
PRAI JP 1994-85831
                            19940331
     JP 1994-103345
                           19940418
     AU 1995-20849
                           19950331
     WO 1995-JP632
                            19950331
     MARPAT 124:146182
os
GI
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ANSWER 3 OF 12 CAPLUS COPYRIGHT 2002 ACS

L4

AB The title compds. I [R1 represents hydrogen, alkyl, halogen, haloalkyl, hydroxy, alkoxy, nitro, amino, cyano, etc.; R2 represents hydrogen, alkyl,

aryl, etc.; R3 and R4 represent each alkyl, etc., or R3 and R4 are combined together to form an optionally substituted heterocyclic group; k

represents an integer of 1 to 4; m and n represent each an integer of 0 to

4; p+q=0 to 4, wherein p is 0, 1 or 2 and q is 0 or 1; and w, x, y and

represent each an integer of 0 to 2, and w+x+y+z = 1 or 2, provided when R1 to R4 represent each a specifically limited group, w+x+y+z may be 0] are prepd. 2-[3-(4-Phenoxypiperidino)propyl]-2H-1,2-benzothiazin-4(3H)-one 1,1-dioxide hydrochloride (II) was prepd. in several steps starting from 2H-1,2-benzothiazin-4(3H)-one 1,1-dioxide ethylene ketal. II at 1 mg/kg i. v. inhibited urinary bladder contractions in rats.

TT 173365-19-0P 173365-20-3P 173365-21-4P 173365-24-7P 173365-25-8P 173365-32-7P 173365-33-8P 173365-36-1P 173365-38-3P 173365-39-4P 173365-40-7P 173365-41-8P 173365-43-0P 173365-45-2P 173365-46-3P 173365-47-4P 173365-48-5P 173365-49-6P 173365-50-0P 173365-68-5P 173365-49-6P 173365-50-0P 173365-68-69 173365-69-0P 173365-68-69 173365-69-0P 173365-68-69 173365-69-0P 17365-69-0P 17365-0P 17365-0

173365-50-9P 173365-67-8P 173365-68-9P 173365-69-0P 173365-70-3P 173365-71-4P

173365-72-5P 173365-70-3P 17336 173365-72-5P 173365-73-6P

RL: BAC (Biological activity or effector, except adverse); SPN (Synthetic

preparation); THU (Therapeutic use); BIOL (Biological study); PREP
(Preparation); USES (Uses)

(prepn. of benzothiazine derivs. for inhibiting dysuria)

RN 173365-19-0 CAPLUS

z

CN 4H-1,2-Benzothiazin-4-one, 2,3-dihydro-2-[3-(4-phenoxy-1-piperidinyl)propyl]-, 1,1-dioxide, monohydrochloride (9CI) (CA INDEX NAME)

● HCl

RN 173365-20-3 CAPLUS

CN 4H-1,2-Benzothiazin-4-one, 2,3-dihydro-2-[3-[4-(phenylmethoxy)-1-piperidinyl]propyl]-, 1,1-dioxide (9CI) (CA INDEX NAME)

RN 173365-21-4 CAPLUS

CN 4H-1,2-Benzothiazin-4-one, 2,3-dihydro-2-[3-[4-(phenylmethoxy)-1-piperidinyl]propyl]-, 1,1-dioxide, monohydrochloride (9CI) (CA INDEX NAME)

HC1

RN 173365-24-7 CAPLUS

CN 2H-1,2-Benzothiazin-3(4H)-one, 2-[3-(4-morpholinyl)propyl]-, 1,1-dioxide (9CI) (CA INDEX NAME)

RN 173365-25-8 CAPLUS

CN 2H-1,2-Benzothiazin-3(4H)-one, 2-[3-(4-morpholinyl)propyl]-, 1,1-dioxide,

(2E)-2-butenedioate (1:1) (9CI) (CA INDEX NAME)

CM 1

CRN 173365-24-7

CMF C15 H20 N2 O4 S

CM 2

CRN 110-17-8

CMF C4 H4 O4

CDES 2:E

Double bond geometry as shown.

$$HO_2C$$
 E
 CO_2H

RN 173365-32-7 CAPLUS

CN 4H-1,2-Benzothiazin-4-one, 2,3-dihydro-2-[2-hydroxy-3-(4-morpholinyl)propyl]-, 1,1-dioxide (9CI) (CA INDEX NAME)

RN 173365-33-8 CAPLUS

CN 2H-1,2-Benzothiazin-3(4H)-one, 2-[2-hydroxy-3-(4-morpholinyl)propyl]-, 1,1-dioxide, (2E)-2-butenedioate (2:1) (salt) (9CI) (CA INDEX NAME)

CM 1

CRN 173365-32-7 CMF C15 H20 N2 O5 S

CM 2

CRN 110-17-8 CMF C4 H4 O4 CDES 2:E

Double bond geometry as shown.

RN 173365-36-1 CAPLUS

CN 4H-1,2-Benzothiazin-4-one, 2,3-dihydro-2-[3-[4-(phenylmethyl)-1-piperidinyl]propyl]-, 1,1-dioxide, monohydrochloride (9CI) (CA INDEX NAME)

HC1

RN 173365-38-3 CAPLUS
CN 4H-1,2-Benzothiazin-4-one, 2-[3-[4-(diphenylmethyl)-1-piperazinyl]propyl]2,3-dihydro-, 1,1-dioxide, monohydrochloride (9CI) (CA INDEX NAME)

HCl

RN 173365-39-4 CAPLUS
CN 4H-1,2-Benzothiazin-4-one, 2,3-dihydro-2-[2-[4-(phenylmethyl)-1-piperidinyl]ethyl]-, 1,1-dioxide, monohydrochloride (9CI) (CA INDEX NAME)

● HCl

RN 173365-40-7 CAPLUS
CN 4H-1,2-Benzothiazin-4-one, 2-[3-(3,4-dihydro-2(1H)-isoquinolinyl)propyl]2,3-dihydro-, 1,1-dioxide, monohydrochloride (9CI) (CA INDEX NAME)

HC1

RN 173365-41-8 CAPLUS
CN 4H-1,2-Benzothiazin-4-one, 2,3-dihydro-2-[3-[4-[(4-methoxyphenyl)methyl]-1piperidinyl]propyl]-, 1,1-dioxide, monohydrochloride (9CI) (CA INDEX NAME)

HC1

RN 173365-43-0 CAPLUS
CN 4H-1,2-Benzothiazin-4-one, 2,3-dihydro-2-[3-(4-morpholinyl)propyl]-,
1,1-dioxide, (2E)-2-butenedioate (1:1) (9CI) (CA INDEX NAME)

CM 1

CRN 173365-42-9
CMF C15 H20 N2 O4 S

CRN 110-17-8 CMF C4 H4 O4 CDES 2:E

Double bond geometry as shown.

RN 173365-45-2 CAPLUS

CN 4H-1,2-Benzothiazin-4-one, 2,3-dihydro-2-[1-phenyl-3-(1-piperidinyl)propyl]-, 1,1-dioxide, monohydrochloride (9CI) (CA INDEX NAME)

● HCl

RN 173365-46-3 CAPLUS

CN 4H-1,2-Benzothiazin-4-one, 2,3-dihydro-2-[3-(4-morpholinyl)-1-phenylpropyl]-, 1,1-dioxide, monohydrochloride (9CI) (CA INDEX NAME)

● HCl

RN 173365-47-4 CAPLUS

CN 4H-1,2-Benzothiazin-4-one, 2,3-dihydro-2-[3-(4-morpholinyl)-1-phenylpropyl]-, 1,1-dioxide, monohydrochloride, (-)- (9CI) (CA INDEX NAME)

Rotation (-).

HCl

RN 173365-48-5 CAPLUS

CN 4H-1,2-Benzothiazin-4-one, 2,3-dihydro-2-[3-(4-morpholinyl)-1-phenylpropyl]-, 1,1-dioxide, monohydrochloride, (+)- (9CI) (CA INDEX NAME)

Rotation (+).

● HCl

RN 173365-49-6 CAPLUS

CN 4H-1,2-Benzothiazin-4-one, 2,3-dihydro-2-[1-phenyl-3-(4-thiomorpholinyl)propyl]-, 1,1-dioxide, monohydrochloride (9CI) (CA INDEX

NAME)

● HCl

RN 173365-50-9 CAPLUS
CN 4H-1,2-Benzothiazin-4-one, 2-[1-(4-chlorophenyl)-3-(4-morpholinyl)propyl]2,3-dihydro-, 1,1-dioxide (9CI) (CA INDEX NAME)

RN 173365-67-8 CAPLUS

CN 4H-1,2-Benzothiazin-4-one, 2,3-dihydro-2-[3-(4-morpholinyl)-3-phenylpropyl]-, 1,1-dioxide, monohydrochloride (9CI). (CA INDEX NAME)

● HCl

RN 173365-68-9 CAPLUS

CN 4H-1,2-Benzothiazin-4-one, 2-[3-(1H-benz[de]isoquinolin-2(3H)-yl)propyl]-

2,3-dihydro-, 1,1-dioxide (9CI) (CA INDEX NAME)

RN 173365-69-0 CAPLUS

CN 4H-1,2-Benzothiazin-4-one, 2-[3-(1H-benz[de]isoquinolin-2(3H)-yl)propyl]-

2,3-dihydro-, 1,1-dioxide, monohydrochloride (9CI) (CA INDEX NAME)

● HCl

RN 173365-70-3 CAPLUS

CN 4-Piperidinecarbonitrile, 1-[3-(3,4-dihydro-1,1-dioxido-4-oxo-2H-1,2-benzothiazin-2-yl)propyl]-4-phenyl- (9CI) (CA INDEX NAME)

RN 173365-71-4 CAPLUS

CN 4-Piperidinecarbonitrile, 1-[3-(3,4-dihydro-1,1-dioxido-4-oxo-2H-1,2-benzothiazin-2-yl)propyl]-4-phenyl-, (2E)-2-butenedioate (1:1) (9CI) (CA

INDEX NAME)

CM 1

CRN 173365-70-3 CMF C23 H25 N3 O3 S

CM 2

CRN 110-17-8 CMF C4 H4 O4 CDES 2:E

Double bond geometry as shown.

RN 173365-72-5 CAPLUS

CN 4-Piperidinecarbonitrile, 1-[3-(3,4-dihydro-1,1-dioxido-4-oxo-2H-1,2-benzothiazin-2-yl)-3-phenylpropyl]-4-phenyl- (9CI) (CA INDEX NAME)

RN 173365-73-6 CAPLUS

CN 4-Piperidinecarbonitrile, 1-[3-(3,4-dihydro-1,1-dioxido-4-oxo-2H-1,2-benzothiazin-2-yl)-3-phenylpropyl]-4-phenyl-, (2E)-2-butenedioate (1:1) (9CI) (CA INDEX NAME)

CM 1

CRN 173365-72-5 CMF C29 H29 N3 O3 S

CM 2

CRN 110-17-8 CMF C4 H4 O4 CDES 2:E

Double bond geometry as shown.

```
AN
     1995:933997 CAPLUS
DN
     123:340165
ΤI
     Preparation of benzothiazine derivatives as serotonin 2 antagonists and
     .alpha.1 blockers
IN
     Mizuno, Akira; Shibata, Makoto; Iwamori, Tomoe; Inomata, Norio
     Suntory Ltd., Japan
PA
so
     PCT Int. Appl., 109 pp.
     CODEN: PIXXD2
DT
     Patent
LΑ
     Japanese
FAN.CNT 3
     PATENT NO.
                                           APPLICATION NO. DATE
                     KIND DATE
                                           -----
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     WO 9518117
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                            19950706
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         RW: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE
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                                           AU 1995-13710
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                            19980430
                      В2
                                          EP 1995-903941
     EP 686632
                      A1
                            19951213
                                                            19941222
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    US 1996-669615
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    US 1998-192287
                      A3
                            19981116
    MARPAT 123:340165
os
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ANSWER 4 OF 12 CAPLUS COPYRIGHT 2002 ACS

L4

GI

AB The title compds. I [broken line indicates the presence or absence of a bond; Z represents C(OR1):, etc.; R1 represents alkyl, aralkyl, etc.; A represents alkylene, alkenylene, etc.; Y represents CH, C: or N, provided

when Y is CH, then m represents 0 or 1, n represents 1 or 2, and B represents 0, S, carbonyl, etc., when Y is C: , then m represents 1, n represents 1 or 2, and B represents :CR6 (wherein the double bond is bound

to Y, and R6 represents optionally substituted aryl, etc.), and when Y is

N, then m represents 0 or 1, n represents 2 of 3, and B represents carbonyl, etc.; E1 and E2 represent each H or lower alkyl; and D represents an arom. hydrocarbon group, arom. heterocyclic group, etc.]

prepd. The title compd. II (prepn. given) at 10-7 M in vitro gave 61.7 $\mbox{\$}$

inhibition of serotonin-induced contraction of isolated guinea pig artery.

IT 170631-53-5P

are

RL: BAC (Biological activity or effector, except adverse); SPN (Synthetic

preparation); THU (Therapeutic use); BIOL (Biological study); PREP
(Preparation); USES (Uses)

(29prepn. of benzothiazine derivs. as serotonin 2 antagonists and .alpha.1 blockers)

RN 170631-53-5 CAPLUS

CN 2H-1,2-Benzothiazine, 2-[3-[4-(4-fluorophenyl)-1-piperazinyl]propyl]-3,4-

dihydro-4,4-dimethoxy-, 1,1-dioxide (9CI) (CA INDEX NAME)

IT 170631-54-6P 170631-55-7P 170631-56-8P

170631-57-9P 170631-58-0P 170631-59-1P

170631-67-1P 170631-68-2P 170631-69-3P

170631-70-6P 170631-71-7P 170631-72-8P

170631-73-9P 170631-74-0P 170631-75-1P

170631-76-2P 170631-77-3P

RL: BAC (Biological activity or effector, except adverse); SPN (Synthetic

preparation); THU (Therapeutic use); BIOL (Biological study); PREP
(Preparation); USES (Uses)

(prepn. of benzothiazine derivs. as serotonin 2 antagonists and .alpha.1 blockers)

RN 170631-54-6 CAPLUS

CN 2H-1,2-Benzothiazine, 2-[3-[4-(4-fluorophenyl)-1-piperazinyl]propyl]-4-methoxy-, 1,1-dioxide (9CI) (CA INDEX NAME)

RN 170631-55-7 CAPLUS
CN 2H-1,2-Benzothiazine, 2-[3-[4-(4-fluorophenyl)-1-piperazinyl]propyl]3,4dihydro-4-methoxy-, 1,1-dioxide (9CI) (CA INDEX NAME)

RN 170631-56-8 CAPLUS
CN Methanone, [1-[3-(3,4-dihydro-4-methoxy-1,1-dioxido-2H-1,2-benzothiazin-2yl)propyl]-4-piperidinyl](4-fluorophenyl)- (9CI) (CA INDEX NAME)

RN 170631-57-9 CAPLUS
CN 2H-1,2-Benzothiazine, 4-ethoxy-2-[3-[4-(4-fluorophenyl)-1-piperazinyl]propyl]-3,4-dihydro-, 1,1-dioxide (9CI) (CA INDEX NAME)

RN 170631-58-0 CAPLUS
CN Phenol, 4-[4-[3-(3,4-dihydro-4-methoxy-1,1-dioxido-2H-1,2-benzothiazin-2yl)propyl]-1-piperazinyl]- (9CI) (CA INDEX NAME)

RN 170631-59-1 CAPLUS

CN 2H-1,2-Benzothiazine, 2-[3-[4-(4-fluorophenyl)-1-piperazinyl]propyl]-3,4-

dihydro-4-(phenylmethoxy)-, 1,1-dioxide (9CI) (CA INDEX NAME)

RN 170631-67-1 CAPLUS

CN 2H-1,2-Benzothiazine, 4,4-bis(ethylthio)-2-[3-[4-(4-fluorophenyl)-1-piperazinyl]propyl]-3,4-dihydro-, 1,1-dioxide (9CI) (CA INDEX NAME)

RN 170631-68-2 CAPLUS

CN 4H-1,2-Benzothiazin-4-one, 2-[3-[4-(4-fluorophenyl)-1-

piperazinyl]propyl]-

2,3-dihydro-, 1,1-dioxide (9CI) (CA INDEX NAME)

RN 170631-69-3 CAPLUS

CN 4H-1,2-Benzothiazin-4-one, 2,3-dihydro-2-[3-(4-phenyl-1-piperazinyl)propyl]-, 1,1-dioxide (9CI) (CA INDEX NAME)

RN 170631-70-6 CAPLUS

CN 4H-1,2-Benzothiazin-4-one, 2-[3-[4-(4-fluorobenzoyl)-1-piperidinyl]propyl]-

2,3-dihydro-, 1,1-dioxide (9CI) (CA INDEX NAME)

RN 170631-71-7 CAPLUS

CN 4H-1,2-Benzothiazin-4-one, 2,3-dihydro-2-[3-(4-phenyl-1-piperazinyl)propyl]-, oxime, 1,1-dioxide (9CI) (CA INDEX NAME)

RN 170631-72-8 CAPLUS

CN 4H-1,2-Benzothiazin-4-one, 2-[3-[4-(4-fluorobenzoyl)-1-piperidinyl]propyl]-

2,3-dihydro-, 4-oxime, 1,1-dioxide (9CI) (CA INDEX NAME)

RN 170631-73-9 CAPLUS

CN 4H-1,2-Benzothiazin-4-one, 2-[3-[4-(4-fluorophenyl)-1-piperazinyl]propyl]-

2,3-dihydro-, oxime, 1,1-dioxide (9CI) (CA INDEX NAME)

RN 170631-74-0 CAPLUS

CN Methanone, [1-[3-(3,4-dihydro-4-hydroxy-1,1-dioxido-2H-1,2-benzothiazin-

2yl)propyl]-4-piperidinyl](4-fluorophenyl)- (9CI) (CA INDEX NAME)

RN 170631-75-1 CAPLUS

CN 2H-1,2-Benzothiazin-4-ol, 2-[3-[4-(4-fluorophenyl)-1-piperazinyl]propyl]-3,4-dihydro-, 1,1-dioxide (9CI) (CA INDEX NAME)

RN 170631-76-2 CAPLUS

CN 2H-1,2-Benzothiazine, 2-[3-[4-(4-fluorophenyl)-1-piperazinyl]propyl]-, 1,1-dioxide (9CI) (CA INDEX NAME)

RN 170631-77-3 CAPLUS

CN 2H-1,2-Benzothiazine, 2-[3-[4-(4-fluorophenyl)-1-piperazinyl]propyl]-3,4-dihydro-, 1,1-dioxide (9CI) (CA INDEX NAME)

L4 ANSWER 5 OF 12 CAPLUS COPYRIGHT 2002 ACS

AN 1994:435514 CAPLUS

DN 121:35514

TI New indole derivatives as potent and selective serotonin uptake inhibitors

AU Mignani, Serge; Damour, Dominique; Doble, Adam; Labaudiniere, Richard; Malleron, Jean Luc; Piot, Odile; Gueremy, Claude

CS Cent. Rech. Vitry-Alfortville, Rhone-Poulenc Rorer S.A., Vitry-sur-Seine,

94403, Fr.

SO Bioorg. Med. Chem. Lett. (1993), 3(10), 1913-18 CODEN: BMCLE8; ISSN: 0960-894X

DT Journal

LA English

GI

AB A new series of serotonin uptake inhibitors is described. Indole derivs.,

e.g. I, were prepd. and exhibit potent and selective activities in a binding assay for the 5-HT uptake site and also behave like strong in vivo

serotonin uptake inhibitors.

IT 148287-50-7P

RL: SPN (Synthetic preparation); PREP (Preparation) (prepn. of, as serotonin uptake antagonist)

RN 148287-50-7 CAPLUS

CN 4H-1,2-Benzothiazin-4-one, 2-[2-[4-[(5-fluoro-1H-indol-3-yl)methyl]-1-piperidinyl]ethyl]-2,3-dihydro-, 1,1-dioxide (9CI) (CA INDEX NAME)

L4 ANSWER 6 OF 12 CAPLUS COPYRIGHT 2002 ACS

AN 1993:472498 CAPLUS

DN 119:72498

TI Preparation of 1-alkyl-4-(arylmethyl)piperidines and their pharmaceutical formulations as inhibitors of 5-HT reuptake

IN Damour, Dominique; Labaudiniere, Richard; Malleron, Jean Luc; Mignani, Serge

PA Rhone-Poulenc Rorer SA, Fr.

SO Fr. Demande, 43 pp.

CODEN: FRXXBL

DT Patent

LA French

FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
FR 2675801	A1	19921030	FR 1991-5048	19910424
MARPAT 119:72498				

os GI

PΙ

Title piperidines I [R1 = OH, (un)substituted Ph, heterocyclyl, R4SO2NR5 (R4 = Ph, quinolyl, R5 = H, alkyl), or N(CO2R8)NHCO2R8 (R8 = alkyl); R2 = CH2, CH2CH2, NH, N-alkylimino; R3 = H, halo; R4 = Ph, quinolyl; n = 1-3; partial bond represents single or double C-C bond, where for R2 = NH, it is a double bond, and for R2 = CH2CH2, it a single bond] are prepd. by condensation of an appropriate alkyl halide R1(CH2)nX with 4-(arylmethyl)piperidine. The prepn. of racemates and enantiomers of compds. I contg. at least one chiral center, and their salts with mineral or org. acids, are claimed. Formulations of I for medical use are given(3 examples). The compds. exhibit inhibitory activity of 5-HT recapture.

Ι

IT 148287-50-7P

RL: SPN (Synthetic preparation); PREP (Preparation) (prepn. of, as inhibitor of 5-HT recapture)

RN 148287-50-7 CAPLUS

CN 4H-1,2-Benzothiazin-4-one, 2-[2-[4-[(5-fluoro-1H-indol-3-yl)methyl]-1-piperidinyl]ethyl]-2,3-dihydro-, 1,1-dioxide (9CI) (CA INDEX NAME)

L4ANSWER 7 OF 12 CAPLUS COPYRIGHT 2002 ACS

AN 1974:48016 CAPLUS

80:48016 DN

Therapeutically active dihydrobenzothiazine-s-dioxides ΤI

Sianesi, Enrico; Da Re, Paulo; Setnikar, Ivo; Massarani, Elena IN

Recordati, S. A. Chemical and Pharmaceutical Co. PA

SO U.S., 7 pp. CODEN: USXXAM

DTPatent

LΑ English

FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
116 3770733	70	10731106	119 1971-176254	19710830

PΙ 19710830 US 3770733 Α 19731106 US 1971-176254

AB Benzothiazinylalkylcarboxamides I (X = CH2, R = H, R1 = H, Me, Et, Pr, CHMe2, Bu, CHMeEt, CMe3, allyl, propargyl, NMe2, NH2, NHEt, NMePh, N:CHMe, NRR1 = NMe2, NEt2, N(CHMe2)2, morpholino, piperidino, pyrrolidino, 4-methylpiperazino; X = CH2CH2, R = H, R1 = CHMe2; X = CMe2, NRR1 = NH2, NHMe, NHCHMe2, NHNMe2) were prepd. for use as hypnotics and anticonvulsants. Thus, o-NCCH2C6H4NH2.HCl was diazotized, and treated with SO2 and CuCl to give o-NCCH2C6H4SO2Cl, which on treatment with NH3 gave o-NCCH2C6H4SO2NH2, followed by cyclization to II (R2 = H). Treatment with BrCH2CO2Et gave II (R2 = CH2CO2Et), which with NH3 gave I (X = CH2, R = R1 = H), having an anticonvulsant ED50 in mice of 50 mg/kg ip.

35263-33-3P 35263-34-4P 35263-35-5P IT 35263-36-6P

RL: SPN (Synthetic preparation); PREP (Preparation) (prepn. of)

35263-33-3 CAPLUS RN

Morpholine, 4-[(3,4-dihydro-1,1-dioxido-2H-1,2-benzothiazin-2-CN yl)acetyl]-(9CI) (CA INDEX NAME)

35263-34-4 CAPLUS RN

Piperidine, 1-[(3,4-dihydro-1,1-dioxido-2H-1,2-benzothiazin-2-CN yl)acetyl]-(9CI) (CA INDEX NAME)

RN 35263-35-5 CAPLUS

Pyrrolidine, 1-[(3,4-dihydro-1,1-dioxido-2H-1,2-benzothiazin-2-CN yl)acetyl]-(9CI) (CA INDEX NAME)

RN 35263-36-6 CAPLUS CN Piperazine, 1-[(3,4-dihydro-1,1-dioxido-2H-1,2-benzothiazin-2-yl)acetyl]-4-methyl- (9CI) (CA INDEX NAME)

L4 ANSWER 8 OF 12 CAPLUS COPYRIGHT 2002 ACS

AN 1974:69 CAPLUS

DN 80:69

TI New benzothiazines. 4. 1H-2,3-Benzothiazin-4(3H)-one 2,2-dioxide and 2H-1,2-benzothiazin-3(4H)-one 1,1-dioxide nitrogen derivatives with central nervous system activity

AU Sianesi, Enrico; Redaelli, Riccardo; Magistretti, Maria J.; Massarani, Elena

CS Res. Div., Recordati S.a.S., Milan, Italy

SO J. Med. Chem. (1973), 16(10), 1133-7 CODEN: JMCMAR

DT Journal

LA English

AB Addnl. data considered in abstracting and indexing are available from a source cited in the original document. Among the 2 series of title compds., the most active hypnotics and anticonvulsants were 3-allyl-1H-2,3-benzothiazin-4(3H)-one 2,2-dioxide (I) [31846-48-7] and 2-allyl-2H-1,2-benzothiazin-3(4H)-one 1,1-dioxide (II) [31848-18-7]. I had a hypnotic ED50 of 250 mg/kg, i.p. and an anticonvulsant ED70 of 100 mg/kg, i.p. in mice; corresponding values for II were 150 and 160 mg/kg. I and II were prepd. by direct alkylation of the resp. benzothiazinone dioxides with allyl bromide.

IT 31848-26-7P

RN 31848-26-7 CAPLUS

CN 2H-1,2-Benzothiazin-3(4H)-one, 2-[2-(4-morpholinyl)ethyl]-, 1,1-dioxide, monohydrochloride (9CI) (CA INDEX NAME)

● HCl

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AN
    1972:72535 CAPLUS
DN
    76:72535
ΤI
    3,4-Dihydro-2H-1,2-benzothiazine-2-acetamide S,S-dioxide derivatives
IN
    Sianesi, Enrico; Da Re, Paolo; Setnikar, Ivo; Massarani, Elena
PA
    Recordati S. A. Chemical and Pharmaceutical Co.
    Ger. Offen., 43 pp.
SO
    CODEN: GWXXBX
DT
    Patent
LΑ
    German
FAN.CNT 1
                                      APPLICATION NO. DATE
    PATENT NO.
                   KIND DATE
    ______
                                       -----
                  Α
    DE 2124953
                         19711216
                                       DE 1971-2124953 19710519
PΙ
                    B2 19741114
    DE 2124953
    DE 2124953
                   C3 19750703
    BE 762273
                   A1 19710701
                                       BE 1971-99171
                                                       19710129
    ES 388284
                   A1 19740216
                                       ES 1971-388284 19710215
                        19720615
    CH 523906
                    Α
                                       CH 1971-523906 19710219
                   Α
                         19720915
    CH 527841
                                       CH 1971-527841 19710219
                   A1 19730730
                                       IL 1971-36248
    IL 36248
                                                       19710222
    NL 7102509
                   A 19711214
A5 19720204
                         19711214
                                       NL 1971-2509
                                                       19710225
    FR 2094180
                                       FR 1971-13767
                                                      19710419
    FR 2094180
                    B1 19741018
    ZA 7103102
                    A 19720126
                                      ZA 1971-3102
                                                      19710512
                    Α
    GB 1337478
                                        GB 1971-19514 19710608
                         19731114
PRAI IT 1970-25826
                         19700611
    For diagram(s), see printed CA Issue.
AΒ
    Title compds. (I), sedatives and hypnotics, were prepd. by reaction of
    amines with I (R = OEt or Cl) or by reaction of 3,4-dihydro-2H-1,2-
    benzothiazine S,S-dioxide (II) with Na alkoxides and ClQCOR. Thus, 7.15
    I (Q = CH2, R = OEt) kept 4 hr with NH3-satd. MeOH at room temp. and
    briefly refluxed, gave 5.3 g I (Q = CH2, R = NH2). Similarly prepd.
were
    27 addnl. I, e.g. (Q and R given): CHEt, NH2; CH2, NHNH2; CH2, NHPr
    (III); CMe2, NMe2; CH2, morpholino. Many I were tested in mice, e.g.
III
    had LD50 560 mg/kg on i.p. administration, the hypnotic effect was ED50
    122 mg/kg and the sedative effect ED50 = 28 mg/kg on oral
administration.
    35263-33-3P 35263-34-4P 35263-35-5P
    35263-36-6P
    RL: SPN (Synthetic preparation); PREP (Preparation)
       (prepn. of)
RN
    35263-33-3 CAPLUS
    Morpholine, 4-[(3,4-dihydro-1,1-dioxido-2H-1,2-benzothiazin-2-
yl)acetyl]-
     (9CI) (CA INDEX NAME)
```

ANSWER 9 OF 12 CAPLUS COPYRIGHT 2002 ACS

L4

RN 35263-34-4 CAPLUS

CN Piperidine, 1-[(3,4-dihydro-1,1-dioxido-2H-1,2-benzothiazin-2-yl)acetyl]-

(9CI) (CA INDEX NAME)

RN 35263-35-5 CAPLUS

CN Pyrrolidine, 1-[(3,4-dihydro-1,1-dioxido-2H-1,2-benzothiazin-2-yl)acetyl]-

(9CI) (CA INDEX NAME)

RN 35263-36-6 CAPLUS

CN Piperazine, 1-[(3,4-dihydro-1,1-dioxido-2H-1,2-benzothiazin-2-yl)acetyl]-4-

methyl- (9CI) (CA INDEX NAME)

```
L4
    ANSWER 10 OF 12 CAPLUS COPYRIGHT 2002 ACS
AN
     1971:476815 CAPLUS
    75:76815
DN
    1,2-Benzothiazine compounds
ΤI
    Hasegawa, Gen; Munakata, Tomohiko; Furuta, Tetsuya; Tsuda, Tachimi
IN
    Yoshitomi Pharmaceutical Industries, Ltd.
PA
     Jpn. Tokkyo Koho, 3 pp.
     CODEN: JAXXAD
DT
     Patent
LA
    Japanese
FAN.CNT 1
    PATENT NO.
                     KIND DATE
                                          APPLICATION NO. DATE
                          _____
                                          -----
     _____ ____
    JP 46022027
                      В4
                           19710622
                                          JΡ
                                                           19690118
PΙ
    For diagram(s), see printed CA Issue.
GI
    I (X = Cl, Br, OMe, Me, H; Y = aminoalkyl; Z = O, S), useful as
AΒ
    antiinflammatants, antibacterials, etc., are manufd. 3-(2-
Thienylcarbonyl)-
     3,4-dihydro-2H - 1,2 - benzothiazin - 4 - one 1,1-dioxide, in a mixt. of
    NaOH, EtOH, and H2O, is treated with 2-morpholinoethyl chloride to give
Ι
     (X = H, Y = morpholinoethyl, Z = S); hydrochloride m. 235-7.degree..
    Similarly prepd. are 10 more I.
IT
    33215-46-2P
    RL: SPN (Synthetic preparation); PREP (Preparation)
        (prepn. of)
    33215-46-2 CAPLUS
RN
    4H-1,2-Benzothiazin-4-one, 2,3-dihydro-2-(2-morpholinoethyl)-3-(2-
CN
thenoyl)-
     , 1,1-dioxide, monohydrochloride (8CI) (CA INDEX NAME)
```

● HCl

L4 ANSWER 11 OF 12 CAPLUS COPYRIGHT 2002 ACS

AN 1971:141829 CAPLUS

DN 74:141829

TI Antispasmodic and narcotic oxodihydrobenzothiazine S-dioxides

IN Sianesi, Enrico; Setnikar, Ivo; Massarani, Elena; Da Re, Paolo

PA Recordati S. A. Chemical and Pharmaceutical Co.

SO Ger. Offen., 74 pp.

CODEN: GWXXBX

DT Patent

LA German

FAN.CNT 2

FAN.		Z TENT NO.	KIND	DATE	74 70	PLICATION NO.	DATE
		ENI NO.	VIND	DATE	AP.		DAIE
PI	DE	2022694	А	19701112	DE	1970-2022694	19700508
	DE	2022694	В2	19741031			
	DE	2022694	C3	19750619			
	ES	378815	A1	19730201	ES	1970-378815	19700420
	BE	749672	Α	19701001	BE	1970-749672	19700428
	NL	7006352	Α	19701111	NL	1970-6352	19700429
	ZA	7003127	Α	19710127	ZΑ	1970-3127	19700508
	FR	2051511	A1	19710409	FR	1970-16831	19700508
	FR	2051511	A5	19710409			
	CH	509340	Α	19710630	CH	1970-509340	19700508
	CH	511249	Α	19710815	CH	1970-511249	19700508
	CH	515266	Α	19711115	CH	1970-515266	19700508
	ΑT	299222	В	19720612	ΑT	1970-4177	19700508
	GB	1308022	Α	19730228	GB	1970-22395	19700508
	SE	373585	В	19750210	SE	1970-6339	19700508
PRAI	ΙT	1969-16635		19690509			

GI For diagram(s), see printed CA Issue.

The 3,4-dihydro-3-oxo-2H'-1, 2-benzothiazine S,S-dioxides (I) and 3,4-dihydro-4-oxo-1H-2,3-benzothiazine S,S-dioxides (II), where R = alkyl, CH2CH:CH2, CH2CONR1R2, are prepd. by cyclization of an o-sul-famoylphenylacetic acid or an o-carboxybenzylsulfonamide in the presence of a dehydrating agent. Thus, o-NCCH2C6H4-SO2Cl, m. 109-11.degree., stirred in C6H6 30 min with introduction of NH3 at 0.degree. gave o-CNCH2C6H4SO2NH2, m. 158-60.degree., refluxed 3 hr in N NaOH and acidified to give o-H2NSO2C6H4CH2CO2H (III), m. 175-80.degree.. III heated 1 hr at 100.degree. with polyphosphoric acid yielded I (R = H), m. 198-201.degree.. Similarly were several I and II prepd.

IT 31848-26-7P

RL: SPN (Synthetic preparation); PREP (Preparation) (prepn. of)

RN 31848-26-7 CAPLUS

CN 2H-1,2-Benzothiazin-3(4H)-one, 2-[2-(4-morpholinyl)ethyl]-, 1,1-dioxide, monohydrochloride (9CI) (CA INDEX NAME)

● HCl

L4 ANSWER 12 OF 12 CAPLUS COPYRIGHT 2002 ACS

AN 1971:141828 CAPLUS

DN 74:141828

TI 1,2-Benzothiazines

IN Hasegawa, Gen; Munakata, Tomohiko; Yoshida, Tetsuya; Tsumagari, Tatsumi

PA Yoshitomi Pharmaceutical Industries, Ltd.

SO Jpn. Tokkyo Koho, 5 pp.

CODEN: JAXXAD

DT Patent

LA Japanese

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
ΡI	JP 46000029	В4	19710105	JР	19680318

GI For diagram(s), see printed CA Issue.

AB 3-Benzoyl-3,4-dihydro-2H-1,2-benzothiazin-4-one 1,1-dioxide (5 g) in 19 ml N NaOH, 13 ml H2O, and 63 ml EtOH was stirred overnight with prperidinoethyl chloride (from 3.7 g HCl salt) to give 3.5 g I (R = Ph, X = CH2CH2, NY2 = piperidino), m. 215-18.degree. Similarly, I were prepd. (R, X, Y, or NY2, and m.p. given): Me, (CH2)3, Pr, 173-5.degree.; p-ClC6H4, (CH2)3, morpholino, 210-12.degree. (HCl salt); Ph, CH2CHMeCH2, '4-phenyl-1-piperazino, 218-21.degree. (HCl salt). Also prepd. were 7-Cl, 6-MeO, and other analogs, in which R was Me3C, 3,4-ClC6H3, p-anislyl, p-tolyl, cyclohexyl, or similar residues.

IT 31848-42-7P 31858-76-1P 32650-75-2P
RL: SPN (Synthetic preparation); PREP (Preparation) (prepn. of)

RN 31848-42-7 CAPLUS

CN 4H-1,2-Benzothiazin-4-one, 3-(p-chlorobenzoyl)-2,3-dihydro-2-(3-morpholinopropyl)-, 1,1-dioxide, hydrochloride (8CI) (CA INDEX NAME)

●x HCl

RN 31858-76-1 CAPLUS

CN 4H-1,2-Benzothiazin-4-one, 3-benzoyl-2,3-dihydro-2-(2-piperidinoethyl)-, 1,1-dioxide (8CI) (CA INDEX NAME)

RN 32650-75-2 CAPLUS

CN 4H-1,2-Benzothiazin-4-one, 3-benzoyl-2,3-dihydro-2-[2-methyl-3-(4-phenyl-1-piperazinyl)propyl]-, 1,1-dioxide, hydrochloride (8CI) (CA INDEX NAME)

●x HCl

L7 ANSWER 1 OF 1 BEILSTEIN COPYRIGHT 2002 BEILSTEIN CDS MDL

Beilstein Records (BRN): 691238

Chemical Name (CN): 2-(2-morpholin-4-yl-ethyl)-1,1-dioxo-1,4-

dihydro-2H-1.lambda.6-

benzo<e><1,2>thiazin-3-

one

Autonom Name (AUN): 2-(2-morpholin-4-yl-ethyl)-1,1-dioxo-1,4-

dihydro-2H-1.lambda.6-

benzo<e><1,2>thiazin-3-

one

Molec. Formula (MF): C14 H18 N2 O4 S

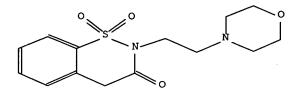
Molecular Weight (MW): 310.37

Lawson Number (LN): 31166, 30824, 3018

Compound Type (CTYPE): heterocyclic

Constitution ID (CONSID): 628350 Tautomer ID (TAUTID): 659824 Beilstein Citation (BSO): 5-27

Entry Date (DED): 1988/11/28 Update Date (DUPD): 1992/11/13



Reference(s):

1. Sianesi, E. et al., J. Med. Chem., CODEN: JMCMAR, 16, <1973>, 1133-1137 CDER

Note(s): Hydrochlorid F:235-238grad

Reference(s):

1. Patent: Recordati S.A. DE 2022694 1970, Chem. Abstr., 74(141829)

Further Information:

FINFO

Reference(s):

1. Patent: Recordati S.A. DE 2022694 1970, Chem. Abstr., 74(141829)

Reference(s):

1. Sianesi, E. et al., J. Med. Chem., CODEN: JMCMAR, 16, <1973>, 1133-1137

L10 ANSWER 1 OF 14 MARPAT COPYRIGHT 2002 ACS

AN 136:151174 MARPAT

TI Preparation of 3-[(arylazabicycloalkyl)alkyl]quinazoline-2,4-diones as serotonin reuptake inhibitors and 5-HT2A receptor antagonists

IN Butler, Todd William; Fliri, Anton Franz Josef; Gallaschun, Randall Jemes

PA Pfizer Products Inc., USA

SO Eur. Pat. Appl., 68 pp.

CODEN: EPXXDW

DT Patent

LA English

FAN.CNT 1

	PAT	CENT	NO.		KII	4D	DATE			AP	PLIC	CATIO	ои ис).	DATE			
PI	ΕP	1178	048		A	L	2002	0206		EP	200	01-3	06629	9	20010	0802		
		R:	ΑT,	BE,	CH,	DE,	DK,	ES,	FR,	GB,	GR,	IT,	LI,	LU,	NL,	SE,	MC,	PT,
			IE,	SI,	LT,	LV,	FI,	RO										
	US	2002	0523	55	A.	l	2002	0502		US	200	01-92	20500)	20010	0801		
	BR	2001	0032	10	Α		2002	0326		BR	200	01-32	210		20010	0803		
	JP	2002	11478	89	Αź	2	2002	0416		JP	200	01-2	36982	2	20010	0803		
PRAI	US	2000	-222	707P	200	0008	03											
GI																		

AB R(CH2)nZR1 [I; e.g., (un) substituted 2,4-dioxoquinazolin-3-yl; R1 = e.g.,

(un) substituted Ph; Z = azabicycloalkylene; n = 3 or 4] were prepd. Thus,

3,2-C1(H2N)C6H3CO2H underwent cyclocondensation/cyclization with C1(CH2)3NCO to give 8-chloro-3,4-dihydro-2H-1-oxa-4a,9-diazaanthracene-

one which underwent aminative ring opening with 3-(4-chlorophenyl)-3,8-diazabicyclo[3.2.1]octane to give title compd. II. Data for biol. activity of I were given.

MSTR 1

10-

G1 = 14-4 17-6

G5 = 154

ዘ**⊊**4─-G6

G11 = SO2

G14 = (1-2) CH2

G15 = 159

159—G16

MPL: claim 1

NTE: and pharmaceutically acceptable salts NTE: additional ring formation also claimed

RE.CNT 13 THERE ARE 13 CITED REFERENCES AVAILABLE FOR THIS RECORD

ALL CITATIONS AVAILABLE IN THE RE FORMAT

L10 ANSWER 2 OF 14 MARPAT COPYRIGHT 2002 ACS

AN 136:85825 MARPAT

TI Preparation of piperazinyl(or piperidinyl)-substituted indole derivatives

for the treatment of CNS disorders

IN Bang-Andersen, Benny; Felding, Jakob; Kehler, Jan

PA H. Lundbeck A/S, Den.

SO PCT Int. Appl., 39 pp.

CODEN: PIXXD2

DT Patent

LA English

FAN.CNT 1

	PA'	rent 1	.00		KI	ND :	DATE			A	PPLI	CATI	ON NO	٥.	DATE			
ΡI	WO	2002	0006	45	A	1 :	2002	0103		W	20	01-D	 K407		2001	0613		
		W:	ΑE,	AG,	AL,	AM,	AT,	AT,	AU,	AZ,	BA,	BB,	BG,	BR,	BY,	BZ,	CA,	CH,
			CN,	CO,	CR,	CU,	CZ,	CZ,	DE,	DE,	DK,	DK,	DM,	DZ,	EE,	EE,	ES,	FI,
			FI,	GB,	GD,	GE,	GH,	GM,	HR,	HU,	ID,	IL,	IN,	IS,	JP,	KE,	KG,	KP,
			KR,	ΚZ,	LC,	LK,	LR,	LS,	LT,	LU,	LV,	MA,	MD,	MG,	MK,	MN,	MW,	MX,
			MZ,	NO,	NZ,	PL,	PT,	RO,	RU,	SD,	SE,	SG,	SI,	SK,	SK,	SL,	ТJ,	TM,
			TR,	TT,	TZ,	UA,	UG,	US,	UZ,	VN,	YU,	ZA,	ZW,	AM,	ΑZ,	BY,	KG,	ΚZ,
			MD,	RU,	ТJ,	TM												
		RW:	GH,	GM,	KE,	LS,	MW,	MZ,	SD,	SL,	SZ,	TZ,	UG,	ZW,	ΑT,	BE,	CH,	CY,
			DE,	DK,	ES,	FI,	FR,	GB,	GR,	IE,	IT,	LU,	MC,	NL,	PT,	SE,	TR,	BF,
			ВJ,	CF,	CG,	CI,	CM,	GA,	GN,	GW,	ML,	MR,	NE,	SN,	TD,	TG		
PRAI GI	DK	2000	-101	8	20	0006	29											

AB The title compds. [I; Y1 = N, which is bound to Z, Z and Y2 = CH2, CO, CS,
SO and SO2, Y3 = O, S, CHR7, Y4 = O, S, CHR8; or Y2 = N, which is bound to
Z, Z and Y1 = CH2, CO, CS, SO and SO2, Y3 = CHR7, Y4 = O, S, CHR8; or Y2

N, which is bound to Z, Z and Y3 = CH2, CO, CS, SO and SO2, Y1 = CHR6, Y4

II

= 0, S, CHR8; W = a bond, O, S, CO, CS, SO, SO2; X = C, CH, N; n = 0-5;

m

= 0-5; n + m = 1-6; one of R1-R4 forms a bond to X and the others of R1-R4

and R5 and R9-R12 = H, halo, CN, etc.; R6-R8 = H, halo; R = H, alkyl, acyl, etc.] and their pharmaceutically acceptable salts which are dopamine

and serotonin receptor ligands, and therefore useful in the treatment of certain psychiatric and neurol. disorders, i. e. schizophrenia and other psychoses, anxiety disorders, depression, migraine, cognitive disorders, ADHD and sleep improvement, were prepd. and formulated. Thus, reacting 5-(piperazin-1-yl)-1H-indole with 1-(2-chloroethyl)-3,4-dihydroquinolin-2(1H)-one (prepns. given) in the presence of LiBr, Et3N and DMF in THF

and

butanone afforded II.oxalate which showed 90% inhibition of the binding of

[3H]YM-09151-2 to human dopamine D4,2 receptors at 50 nM, and IC50 of 29 nM against 5-HT2A binding.

MSTR 1

$$61-67-69-3616$$

$$G7 = 30-1 27-3$$

$$G10 = (1-5) CH2$$

$$G15 = S02$$
 $G16 = 281$

$$G28 = 343$$

MPL: claim 1

NTE: or pharmaceutically acceptable salts

NTE: substitution is restricted

RE.CNT 4 THERE ARE 4 CITED REFERENCES AVAILABLE FOR THIS RECORD ALL CITATIONS AVAILABLE IN THE RE FORMAT

```
AN
     136:37528 MARPAT
ΤI
     Preparation of indole derivatives for the treatment of CNS disorders
IN
     Bang-Andersen, Benny; Felding, Jakob; Kehler, Jan; Andersen, Kim
PA
     H. Lundbeck A/S, Den.
so
     PCT Int. Appl., 59 pp.
     CODEN: PIXXD2
DT
     Patent
LΑ
     English
FAN.CNT 1
     PATENT NO.
                     KIND DATE
                                          APPLICATION NO. DATE
                                          ΡI
     WO 2001096328
                      A1
                           20011220
                                          WO 2001-DK406
                                                           20010613
         W: AE, AG, AL, AM, AT, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH,
             CN, CO, CR, CU, CZ, CZ, DE, DE, DK, DK, DM, DZ, EE, EE, ES, FI,
             FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP,
             KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX,
            MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SK, SL, TJ, TM,
            TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ,
            MD, RU, TJ, TM
         RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY,
             DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF,
             BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG
PRAI DK 2000-919
                     20000614
     US 2000-212445P 20000616
GΙ
* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT *
AB
     The title compds. [I; one of Y1, Y2 = N, which is bound to Y4, and the
     other Y1 and Y2 = CO, CS, SO, etc; Y4 = CH2, CO, CS, etc.; Y3 = ZCH2,
     CH2Z, CH2CH2; Z = 0, S; W = a bond, O, S, etc.; n = 0-5; m = 0-5; m + n
     1-10; X = C, CH, N; R1-R9 = H, halo, CN, etc.; R10 = H, alkyl, aryl,
etc.]
     which are dopamine and serotonin receptor ligands, and are useful in the
     treatment of certain psychiatric and neurol. disorders, i.e.
     schizophrenia, other psychoses, anxiety disorders, depression, migraine,
     cognitive disorders, ADHD and sleep improvement, were prepd. and
     formulated. Thus, reacting 5-fluoro-3-(piperidin-4-yl)-1H-indole with
     1-(2-chloroethyl)-3,4-dihydroquinolin-2-(1H)-one in the presence of Et3N
     in DMF and butanone afforded II which showed 92% inhibition of the
binding
     of [3H]YM-09151-2 to human dopamine D4 receptors at 50 nM.
  MSTR 1
```

ANSWER 3 OF 14 MARPAT COPYRIGHT 2002 ACS

L10

ç1—**ç**7—**ç**9—<u>3</u>**ç**16

 $G7 = 30-1 \ 27-3$

G10 = (1-6) CH2 G14 = CH2CH2 G15 = SO2 G16 = 48

$$48 G_{15} G_{2} G_{2}$$

MPL: claim 1

NTE: or pharmaceutically acceptable acid addition salts

NTE: substitution is restricted

RE.CNT 9 THERE ARE 9 CITED REFERENCES AVAILABLE FOR THIS RECORD

ALL CITATIONS AVAILABLE IN THE RE FORMAT

L10 ANSWER 4 OF 14 MARPAT COPYRIGHT 2002 ACS

AN 134:222727 MARPAT

TI Preparation of tetrahydroquinazoline-2,4-diones for inhibiting serotonin reuptake or 5-HT2A serotonin receptor binding

IN Butler, Todd William; Fliri, Anton Franz Josef; Gallaschun, Randall
James;

Jones, Brian Patrick; Ragan, John Anthony

PA Pfizer Products Inc., USA

SO Eur. Pat. Appl., 35 pp.

CODEN: EPXXDW

DT Patent

LA English

FAN.CNT 1

E MIA .	~14 T	1																
	PAT	CENT :	NO.		KI	ND	DATE			A	PLIC	CATI	ON NO	ο.	DATE			
PI	EP	1083	178		A.	1.	2001	0314		E	200	00-3	0743	3	20000	0830		
		R:	AT,	BE,	CH,	DE,	DK,	ES,	FR,	GB,	GR,	IT,	LI,	LU,	NL,	SE,	MC,	PT,
			ΙE,	SI,	LT,	LV,	FΙ,	RO										
	JP	2001	1147	78	A.	2	2001	0424		JE	200	00-2	6111!	5	20000	0830		
	JΡ	3285	343		B	2	2002	0527										
	JP	2002	2121	61	A.	2	2002	0731		JE	200	01-3	37442	2	20000	0830		
PRAI	US	1999	-151	725P	199	9908	31											
	JP	2000	-261	115	200	0008	30											

GI

$$R^2$$
 X
 V
 R^5
 R^4
 I

AB The title compds. [I; A = (CH2)n (wherein n = 0-2); U = CH2, NH, NR3;

R1,

R2 = H, alkyl, C1, etc.; or R1 and R2, together with the atoms to which they are attached, form 5-6 membered carbocyclic or heterocyclic ring;

R3

= H, alkyl, C(0) alkyl; R4, R5 = H, alkyl, C1, etc.; V = CH, CR3, N; W = CH2, CO, SO2; X = C, N; Y = CH, CR1, CR2, N] and their pharmaceutically acceptable salts, useful in treating diseases, conditions or disorders

of

the central nervous system, were prepd. Thus, treatment of Me 2-amino-5-methylbenzoate with triphosgene in the presence of Et3N in CH2Cl2 followed by addn. of 3-[4-(4-chlorophenyl)-3,6-dihydro-2H-

pyridin-1-

yl]propylamine (prepn. given) afforded 79% II. The exemplified compds.

showed more than 50% inhibition at <50 nM in the serotonin reuptake assay $\,$

and binding assays for 5-Ht2A serotonin receptor.

MSTR 1

$$G1 = 14-4 17-6$$

$$G2 = 107$$

G5 = CH2 MPL: claim 1

NTE: or pharmaceutically acceptable salts

RE.CNT 5 THERE ARE 5 CITED REFERENCES AVAILABLE FOR THIS RECORD ALL CITATIONS AVAILABLE IN THE RE FORMAT

```
L10 ANSWER 5 OF 14 MARPAT COPYRIGHT 2002 ACS
AN
     131:170632 MARPAT
ΤI
    Novel cyclic sulfonamide derivatives as metalloproteinase inhibitors
IN
     Duan, Jingwu; Chen, Lihua; Cherney, Robert J.; Decicco, Carl P.; Voss,
PA
    Du Pont Pharmaceuticals Company, USA
     PCT Int. Appl., 144 pp.
SO
    CODEN: PIXXD2
DT
     Patent
    English
LΑ
FAN.CNT 1
     PATENT NO.
                     KIND DATE
                                         APPLICATION NO. DATE
     ______
                                         -----
    WO 9941246
                     A1 19990819
                                         WO 1999-US2767 19990210
PΙ
        W: AU, CA, IL, JP, MX, NZ
        RW: AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL,
            PT, SE
                           19990819
    CA 2319173
                      AA
                                          CA 1999-2319173 19990210
    AU 9925947
                      A1
                           19990830
                                         AU 1999-25947
                                                          19990210
                                         EP 1999-905898 19990210
    EP 1054877
                     A1
                           20001129
        R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, PT, IE,
FI
     JP 2002503657
                      T2
                           20020205
                                        JP 2000-531441
                                                          19990210
PRAI US 1998-74301P
                     19980211
    WO 1999-US2767
                     19990210
AB
    Cyclic sulfonamides ACR1R2NR3SO2CR4:CR5R6 [A = CHO, alkanoyl, CO2H or
    esters, CHRCO2H (R = H, Me, Et, i-Pr, vinyl, 1- or 2-propenyl),
CHRCONHOH,
    CONHOH or O-substituted derivs., (un) substituted amino, SH, CH2SH,
     (un) substituted SONH2 or SNHNH2, P(O)(OH)2, (un) substituted P(O)(OH)NH2;
    R1 = H, Q (carbocyclic or heterocyclic residue), alkylene-Q, alkenylene-
Q,
    alkynylene-Q, oxa- or aza-alkylene-Q, etc.; R2 = H, alkylene-H,
    alkenylene-H, alkynylene-H, oxa- or aza-alkylene-H, etc.; R3 and R5 form
    an (un) substituted 5-10 membered ring contg. 0-2 addnl. heteroatoms and
    0-1 double bonds; R4 and R6 form benzo or (un) substituted heteroarom.
    ring] were prepd. as metalloprotease inhibitors. Thus,
     (R)-4,5-dihydro-N-hydroxy-.alpha.-methyl-1,2,5-benzothiadiazepine-2(3H)-
    acetamide 1,2-dioxide was prepd. starting from the reaction of
    2-nitrobenzenesulfonyl chloride with D-alanine Me ester hydrochloride.
 MSTR 1
```

$$G1 = 180$$

$$G19 = 239-2 232-4$$

G45 = 225

DER: or pharmaceutically acceptable salts

MPL: claim 1

NTE: substitution is restricted

STE: or stereoisomers

RE.CNT 13 THERE ARE 13 CITED REFERENCES AVAILABLE FOR THIS RECORD

ALL CITATIONS AVAILABLE IN THE RE FORMAT

```
L10
    ANSWER 6 OF 14 MARPAT COPYRIGHT 2002 ACS
     130:352182 MARPAT
AN
ΤI
     Preparation of hydroxamic and carboxylic acid derivatives having MMP and
     TNF inhibitory activity
IN
     Baxter, Andrew Douglas; Owen, David Alan; Montana, John Gary; Nicholson,
     Elisabeth Jane Reed
PA
     Darwin Discovery Limited, UK
     PCT Int. Appl., 26 pp.
SO
     CODEN: PIXXD2
DT
     Patent
     English
LA
FAN.CNT 1
                                                            DATE
     PATENT NO.
                      KIND
                            DATE
                                           APPLICATION NO.
                      ____
                                           -----
                            19990520
                                           WO 1998-GB3396
PΙ
     WO 9924419
                       A1
                                                            19981112
        W: AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE,
             DK, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IS, JP, KE,
             KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW,
             MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR,
             TT, UA, UG, UZ, VN, YU, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM
         RW: GH, GM, KE, LS, MW, SD, SZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES,
             FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI,
             CM, GA, GN, GW, ML, MR, NE, SN, TD, TG
     CA 2308361
                            19990520
                                           CA 1998-2308361 19981112
                       AΑ
     AU 9910470
                       A1
                            19990531
                                           AU 1999-10470
                                                            19981112
```

ZA 1998-10359

19981112

20020418 19991112

US 1997-68793P 19971224 US 1998-190334 19981112 WO 1998-GB3396 19981112

B2

Α

AU 746158

ZA 9810359

GΙ

AB The title compds. [I; n = 1-2; X = 0, S(0)0-2; Y = OH, NHOH; W = CR3, N(when X = SO2); R1 = H, alkyl, alkenyl, etc.; R2 = H, alkyl; CR1R2 = (un)substituted cycloalkyl, heterocycloalkyl; R3-R5 = H, alkyl; R3R4 = abond; R6-R9 = H, alkyl, aryl, etc.; R6 and R7, R7 and R8, R8 and R9, R8, R8,

form

aryl, heteroaryl, cycloalkenyl, heterocycloalkenyl], useful as therapeutic

agents, by virtue of having MMP and TNF inhibitory activity, were prepd. Thus, treatment of 3-methylbenzo[b]thiophene-2-acetic acid with BuLi/hexanes followed by addn. of 1-bromo-3-phenylpropane afforded 37% II.

Compds. I are effective at 0.01-50 mg/kg/day.

MSTR 1

$$G1 = 41$$

$$G4 = 51$$

G5 =
$$alkyl < (1-6) > (SO (1-) G8)$$

G8 = 65

DER: and salts, solvates, hydrates, N-oxides, and protected amine, carboy,

and hydroxamic derivatives

MPL: claim 1

NTE: additional ring formation also claimed

RE.CNT 14 THERE ARE 14 CITED REFERENCES AVAILABLE FOR THIS RECORD ALL CITATIONS AVAILABLE IN THE RE FORMAT

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L10 ANSWER 7 OF 14 MARPAT COPYRIGHT 2002 ACS
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AN 129:211720 MARPAT

TI Dopamine D4 receptor antagonist

IN Ohno, Yukihiro; Kojima, Atsuyuki; Wakabayashi, Junko; Tagashira, Rie

PA Sumitomo Pharmaceuticals Co., Ltd., Japan

SO PCT Int. Appl., 32 pp.

CODEN: PIXXD2

DT Patent

LA Japanese

FAN.CNT 1

GΙ

PAN.	CNT	Т																
	PA	TENT I	NO.		KI	ND	DATE			A	PPLI	CATI	ON NO	٥.	DATE			
										_								
ΡI	WO	9837	893		Α	1	1998	0903		W	O 19	98-J	P744		1998	0223		
		W:	AL,	AM,	AT,	AU,	ΑZ,	BA,	BB,	BG,	BR,	BY,	CA,	CH,	CN,	CU,	CZ,	DE,
			DK,	EE,	ES,	FI,	GB,	GE,	GH,	GM,	GW,	HU,	ID,	IL,	IS,	JP,	ΚE,	KG,
			KR,	ΚZ,	LC,	LK,	LR,	LS,	LT,	LU,	LV,	MD,	MG,	MK,	MN,	MW,	MX,	NO,
			NZ,	PL,	PT,	RO,	RU,	SD,	SE,	SG,	SI,	SK,	SL,	ТJ,	TM,	TR,	TT,	UA,
			UG,	US,	UZ,	VN,	YU,	ZW,	AM,	ΑZ,	BY,	KG,	ΚZ,	MD,	RU,	ТJ,	TM	
		RW:	GH,	GM,	KE,	LS,	MW,	SD,	SZ,	UG,	ZW,	AT,	BE,	CH,	DE,	DK,	ES,	FI,
			FR,	GB,	GR,	ΙE,	IT,	LU,	MC,	NL,	PT,	SE,	BF,	ВJ,	CF,	CG,	CI,	CM,
			GA,	GN,	ML,	MR,	NE,	SN,	TD,	TG								
	ΑU	9862	306		Α	1	1998	0918		A	J 19	98-6	2306		1998	0223		
PRAI	JP	1997	-598	09	19	9702	26											
	WO	1998	-JP7	44	19	9802	23											

II

AB An imide deriv. represented by general formula (I) [wherein Z is represented by formula (2) (wherein B represents a carbonyl group or the like; for R1, R2, and R3, R1 and R2 combine with each other to form an optionally substituted hydrocarbon ring with R3 representing a hydrogen atom, or alternatively R1 and R3 may combine with each other to form an optionally substituted hydrocarbon ring with R2 representing a hydrogen atom; and n is 0 or 1), or a group represented by R4CO-NR5-(wherein R4 represents an optionally substituted Ph group or the like; and R5 represents a hydrogen atom or a lower alkyl group); W represents an optionally substituted lower alkylene group or the like, G represents a nitrogen atom or a methine group; Ar represents an optionally substituted

pyrimidyl group or the like; and Y represents a hydrogen atom or -(CH2)m-

(wherein m is 1, 2 or 3) with the other end being optionally bonded to the

o-position of Ar] or a pharmaceutically acceptable salt thereof is an antagonist against a dopamine D4 receptor that does not cause an extrapyramidal syndrom assocd. with dopamine D2 receptor antagonism and

is useful as a therapeutic agent for mental disorder, e.g., schizophrenia in a neg. state or the like and L-DOPA mental disorder during treatment of Parkinson's disease.

MSTR 1

$$G1 = 14$$

G2 = SO2 G3 = o-C6H4 G5 = CH2

G9 = loweralkylene (SO)

MPL: claim 1

NTE: additional ring formation also claimed NTE: additional substitution also claimed

L10 ANSWER 8 OF 14 MARPAT COPYRIGHT 2002 ACS

AN 129:54361 MARPAT

TI Preparation of benzisothiazolones and analogs as .alpha.1C-adrenergic receptor antagonists

IN Huff, Joel R.; Lee, Hee-yoon; Nerenberg, Jennie B.; Thompson, Wayne J.; Bell, Ian M.

PA Merck and Co., Inc., USA

SO U.S., 57 pp., Cont.-in-part of U.S. Ser. No. 229,276, abandoned. CODEN: USXXAM

DT Patent

LA English

FAN.CNT 2

LTIA.	CIVI	2																
	PA'	TENT :	NO.		KI	ND	DATE			A	PPLI	CATI	N NC	0.	DATE			
ΡI	US	5760	054		Α		1998	0602		U	s 19	96-7	2200	1	1996	1001		
	WO	9528	397		Α	1	1995	1026		W	o 19	95-U	S459	0	1995	0413		
		W:	AM,	AU,	BB,	BG,	BR,	BY,	CA,	CN,	CZ,	EE,	FI,	GE,	HU,	IS,	JP,	KG,
			KR,	ΚZ,	LK,	LR,	LT,	LV,	MD,	MG,	MN,	MX,	NO,	NZ,	PL,	RO,	RU,	SG,
			SI,	SK,	TJ,	TT,	UA,	US,	UZ									
		RW:	KE,	MW,	SD,	SZ,	UG,	ΑT,	BE,	CH,	DE,	DK,	ES,	FR,	GB,	GR,	ΙE,	ΙΤ,
			LU,	MC,	NL,	PT,	SE,	BF,	ВJ,	CF,	CG,	CI,	CM,	GΑ,	GN,	ML,	MR,	NE,
			SN,	TD,	TG													
PRAI	US	1994	-229	276	19	9404	13											
	WO	1995	-US4	590	19	9504	13											
GI																		

AB The invention relates to the claimed title compds. I [n = 3-5; B = C or N;

R1, R2, R3, R4 = H, halo, NO2, NH2, (un)substituted alkyl, alkoxy, aryl, heteroaryl, etc.; R5, R6, R7, R8 = H, alkyl, alkenyl, alkoxy; Z = O, S, CH2, NH, NMe] and analogs. Also disclosed are the synthesis and use of the compds. as selective .alpha.1C-adrenergic receptor antagonists. The primary application of the compds. is in the treatment of benign prostatic

hypertrophy (BPH). The compds. selectively relax smooth muscle tissue

enriched in the .alpha.1C receptor subtype without inducing orthostatic hypotension. The compds. provide acute relief of BPH by permitting less hindered urine flow. I and analogs are also useful in combination with human 5.alpha.-reductase inhibitors, providing both acute and chronic relief from the effects of BPH. Approx. 130 specific invention compds. are disclosed. The cloning and use of a cDNA for a human .alpha.1C adrenoceptor in an in vitro assay is described. For instance, alkylation

of 1-(4-piperidiny1)-3-benzoxazolin-2-one.HCl (prepd. in 4 steps) with 2-(4-bromobutyl)-1,1-dioxido-1,2-benzisothiazol-3(2H)-one in the presence

of (i-Pr)2NEt in DMF gave 40% title compd. II. Selected compds. showed nanomolar or subnanomolar affinity for human .alpha.1C receptor subtype while showing 30-fold lower affinity for human .alpha.1A and .alpha.1B subtypes (no data).

MSTR 2C

$$G10$$
 $G13$ N $G1$ $G7$

$$G1 = (3-5) CH2$$

 $G7 = 275$

G8 = SO2

DER: and pharmaceutically acceptable salts, prodrugs, polymorphs, or

metabolites

MPL: disclosure

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L10 ANSWER 9 OF 14 MARPAT COPYRIGHT 2002 ACS
```

AN 128:140729 MARPAT

TI Preparation of 3-[2-(4-arylazino)ethyl]-2-indolones and analogs as antiincontinence agents

IN Kato, Kaneyoshi; Doi, Takayuki; Sugiura, Yoshihiro; Kawada, Mitsuru

PA Takeda Chemical Industries, Ltd., Japan; Kato, Kaneyoshi; Doi, Takayuki; Sugiura, Yoshihiro; Kawada, Mitsuru

SO PCT Int. Appl., 185 pp.

CODEN: PIXXD2

DT Patent

LA English

FAN.CNT 1

	PATENT NO. KIND DATE									A	PPLI	CATI	ои ис	ο.	DATE			
ΡI	wo	9802	432		A	1	1998	0122		W	19	97-J	P244	7	1997	0715		
		W:	AL,	AM,	ΑU,	ΑZ,	BA,	BB,	BG,	BR,	BY,	CA,	CN,	CU,	CZ,	EE,	GE,	HU,
			IL,	IS,	KG,	KR,	ΚZ,	LC,	LK,	LR,	LT,	LV,	MD,	MG,	MK,	MN,	MX,	NO,
			ΝZ,	PL,	RO,	RU,	SG,	SI,	SK,	SL,	TJ,	TM,	TR,	TT,	UA,	US,	UZ,	VN,
			YU,	AM,	ΑZ,	BY,	KG,	ΚZ,	MD,	RU,	ТJ,	TM						
		RW:	GH,	KE,	LS,	MW,	SD,	SZ,	UG,	ZW,	ΑT,	BE,	CH,	DE,	DK,	ES,	FI,	FR,
			GB,	GR,	ΙE,	ΙT,	LU,	MC,	NL,	PT,	SE,	BF,	ВJ,	CF,	CG,	CI,	CM,	GΑ,
			GN,	ML,	MR,	ΝE,	SN,	TD,	TG									
	AU	9734	607		A	1	1998	0209		Αl	J 199	97-3	4607		19970	0715		
	JP	1033	8672		A.	2	1998	1222		JI	2 199	97-1	8883	1	19970	0715		
PRAI	JP	1996	-186	025	19	9607	16											
	JP	1997	-879	80	19	9704	07											
	WO	1997	-JP2	447	199	9707	15											

$$\mathbb{R}^1$$

GΙ

1

AB Title compds. [(ring-substituted) I; R = (CH2)mZ1Z2R2; R1,R2 = (un)substituted aryl; Z = atoms to complete a (heterocyclic) ring; Z1 = (un)substituted N-attached heterocyclylene; Z2 = bond or (oxo)alkylene; m

= 1-3] were prepd. Thus, PhCH2CO2Et was arylated by 4-FC6H4NO2 and the cyclized product converted in 3 steps to title compd. II. Data for biol.

activity of I were given.

MSTR 1

G1 =
$$o-C6H4$$
 (SO G20)
G9 = $(0-2)$ CH2

$$G10 = 18-1 \ 19-15$$

$$G11 = S02$$

$$G12 = alkyl < (1-6) > (SO (1-5) G21)$$

MSTR 2

G1 =
$$o-C6H4$$
 (SO G20)
G9 = $(0-2)$ CH2

$$G9 = (0-2) CH2$$

 $G10 = 18-1 19-15$

$$G11 = S02$$
 $G12 = 77$

L10 ANSWER 10 OF 14 MARPAT COPYRIGHT 2002 ACS

AN 126:144283 MARPAT

TI Preparation of benzothiazine derivatives as serotonin-2-receptor antagonists

IN Mizuno, Akira; Shibata, Makoto; Iwamori, Tomoe; Inomata, Norio

PA Suntory Limited, Japan

SO Eur. Pat. Appl., 62 pp. CODEN: EPXXDW

DT Patent

LA English

FAN.CNT 3

E2

as

and

PAIN.	CNI 3			
	PATENT NO.	KIND DATE	APPLICATION NO.	DATE
ΡI	EP 749967	A1 19961227	EP 1996-110050	19960621
	R: AT, BE,	CH, DE, DK, ES, FI,	FR, GB, GR, IE, IT,	LI, LU, MC, NL,
	PT, SE			
	JP 09012562	A2 19970114	JP 1995-177976	19950622
	CA 2179679	AA 19961223	CA 1996-2179679	19960621
PRAI	JP 1995-177976	19950622		
GI				

MeO

NAN

(CH2)
$$n$$

Y (B) mD

II

AB The title compds. [I; Z = C(O), CH2, CH, etc.; Q1 = H, OH, halo, etc.; Q2

= OH, halo, alkyl, etc.; A = (un)substituted alkylene, alkenylene, alkynylene; Y = CH, C, N; m = 0, 1; n = 1-3; B = 0, S, C(0), etc.; E1,

= H, lower alkyl; D = an arom. hydrocarbon group or an arom. heterocyclic

group], having strong serotonin-2 blocking action, excellent selectivity to this action against .alpha.1 blocking action, high safety, and therefore useful as therapeutics for various circulatory diseases such

ischemic heart diseases, cerebrovascular disturbances and peripheral circulatory disturbances, were prepd. Thus, reaction of 2-(3-chloropropyl)-6-methoxy-3,4-dihydro-2H-1,2-benzothiazin-4-one 1,1-dioxide ethylene acetal with 1-(4-fluorophenyl)piperazine in the presence of NaHCO3, NaI in MeCN afforded 93% II which showed 63.0% and 62.3% (of the control) contractions of the superior mesenteric artery

thoracic aorta of Hartley male guinea pig, resp., at 10-7 M as

anti-serotonin and anti-.alpha.1 action.

MSTR 1

$$G4 = 33$$

G12 = alkenylene (SO)
G14 =
$$204-6$$
 $208-1$

DER: or salts MPL: claim 1

NTE: substitution is restricted

STE: or isomers

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L10 ANSWER 11 OF 14 MARPAT COPYRIGHT 2002 ACS
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AN 124:176079 MARPAT

TI Preparation of heterocycles as .alpha.1c adrenergic receptor antagonists

IN Huff, Joel R.; Lee, Hee-Yoon; Nerenberg, Jennie B.; Thompson, Wayne J.

PA Merck and Co., Inc., USA

SO PCT Int. Appl., 209 pp.

CODEN: PIXXD2

DT Patent

LA English

FAN. CNT 2

ran.		Z PENT 1	NO.		KII	ND	DATE			A	PPLI	CATI	ON N	ο.	DATE			
ΡI	WO	9528	397		A.	1	1995	1026		W	0 19	95-U	s459	0	1995	0413		
		W:	AM,	AU,	BB,	BG,	BR,	BY,	CA,	CN,	CZ,	EE,	FI,	GE,	HU,	IS,	JP,	KG,
			KR.	KZ.	LK.	LR.	LT,	LV.	MD.	MG.	MN.	MX.	NO.	NZ.	PL.	RO.	RU.	SG.
			•	•	•		UA,	•	•					•			•	
		RW:	•				ŪG,	-		CH,	DE,	DK,	ES,	FR,	GB,	GR,	IE,	IT,
							SE,											
			SN,	TD,	TG	•	•	•	•	•	•	•	•	•	•	•	•	•
	CA	2187	767	•	A.	Ą	1995	1026		C	A 19	95-2	1877	67	1995	0413		
		9523				_	1995											
		6884				-	1998									0 1 1 0		
		7553			_					FI	D 10	a5_a	1756	5	1005	0/13		
	ĽE																ВШ	C E
			•	•	•	•	DK,	•	•	•	•	•	•	•	•		PT,	SE
	JP	0951	2016		T	2	1997	1202		J]	P 19	95-5	2709	7	1995	0413		
	US	5760	054		Α		1998	0602		U:	s 19	96-7	2200	1	1996	1001		
PRAI	US	1994	-229	276	199	9404	14											
	WO	1995	-US4	590	199	9504	13											
GI																		

AB Title compds. such as I (R1, R2, R3, R4 = H, NO2, NH2, etc.; R5, R6, R7, R8 = H, alkyl, alkenyl, alkoxy, etc.) and II, effective testosterone reductase inhibitors useful in treatment of benign prostatic hyperplasia,

were prepd. Alkylation of 1-(4-piperidinyl)-3-benzoxazolin-2-one.HCl

1

ΙI

with

2-(4-bromobutyl)-1,1-dioxo-1,2-benzothiazol-3(2H)-one in the presence of (i-Pr)2NEt in DMF afforded 40% I (R1-R8 = H). Title compds. are effective

at 0.001 mg/kg - 7 mg/kg per day in humans.

MSTR 1

G30_G1__G2

$$G1 = (3-5) \text{ CH2}$$

 $G2 = 6$

$$G3 = 13-6 14-4$$

1910194



DER: and pharmaceutically acceptable salts, prodrugs, polymorphs, or

metabolites

MPL: claim 1

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L10 ANSWER 12 OF 14 MARPAT COPYRIGHT 2002 ACS
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AN 118:219850 MARPAT

ΤI Preparation of serotoninergic antagonists for pharmaceuticals

IN Damour, Dominique; Labaudiniere, Richard; Malleron, Jean Luc; Mignani, Serge

PA Rhone-Poulenc Rorer SA, Fr.

Eur. Pat. Appl., 16 pp. so

CODEN: EPXXDW

Patent DT

LA French

FAN.	CNT	1														
	PA	rent	NO.		KI	ND	DATE			AI	PLI	CATI	ON N	ο.	DATE	
PI	EP	5110 R:			A	1	1992	1028		E	? 19	92-4	0110	9	1992	0421
	FR	2675	802		A.	1	1992	1030		FF	R 19:	91-5	170		1991	0426
	FR	2675	802		В	1	1993	1224								
	CA	2103	562		A	A	1992	1027		CA	A 19	92-2	1035	62	1992	0421
	WO	9219	624		A.	1	1992	1112		WC	19	92-F	R354		1992	0421
		W:	CA,	FI,	JP,	NO,	. US									
		RW:	AT,	BE,	CH,	DE,	DK,	ES,	FR,	GB,	GR,	IT,	LU,	MC,	, NL,	SE
	ΕP	5833	22		A.	1	1994	0223		E	19	92-9	0977	6	1992	0421
		R:	ΑT,	BE,	CH,	DE,	DK,	ES,	FR,	GB,	GR,	IT,	LI,	LU,	, NL,	SE
	JP	0650	7162		T	2	1994	0811		JE	19	92-5	0923	9	1992	0421
	NO	9303	121		Α		1993	0901		NC	19	93-3	121		1993	0901
	US	5563	144		Α		1996	1008		บร	3 19	95-4	7072	6	1995	0606
PRAI	FR	1991	-517	0	19	9104	126									
	WO	1992	-FR3	54	199	9204	121									
	US	1993	-137	091	19	931	026									
GI																

AΒ R1(CH2)n-Het (where R1 = I, II, III; n = 1-4; Het = e.g., 4-phenyl-1,2,3,6-tetrahydro-1-pyridyl; R2 = H, Ph; R3 = H, halo,heterocycle; R4 = CO, SO2; R5 = SiMe2, CMe2) are prepd. for use in treatment of diseases involving serotonin. Thus, 3-(3-chloropropyl)-1,1-

dimethyl-5-fluoro-4-oxo-1,2,3,4-tetrahydro-3,1-benzazasiline was treated with 1-phenylpiperazine in the presence of Et3N in toluene soln. to give 1,1-dimethyl-5-fluoro-4-oxo-3-[3-(4-phenyl-1-piperazinyl)propyl]-

1,2,3,4-

tetrahydro-3,1-benzazasiline. Tablets contg. 50 mg of this compd. were prepd.

MSTR 1

$$G3 = 36-2 \ 41-34$$

G4 = SO2 G5 = CMe2 G6 = 83

G9 = (1-4) CH2

DER: and mineral or organic acid salts

MPL: claim 1

NTE: substitution is restricted

L10 ANSWER 13 OF 14 MARPAT COPYRIGHT 2002 ACS

AN 115:239772 MARPAT

TI Pharmaceutical compositions containing [4-(2-pyrimidinyl)-1-piperazinyl]butyl derivatives for treatment of intestinal motility disorders

IN Croci, Tiziano; Bianchetti, Alberto; Manara, Luciano

PA Midy S.p.A., Italy

SO Fr. Demande, 12 pp. CODEN: FRXXBL

DT Patent

LA French

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
ΡI	FR 2654934	A1	19910531	FR 1989-15734	19891129
	FR 2654934	B1	19940930		

AB Pharmaceutical compns. contg. the title derivs. (Markush included) are provided for treatment of intestinal motility disorders, esp. constipation. Tablet formulations of buspirone-HCl and of gepirone-HCl and a dragee formulation of buspirone-HCl are included.

Anticonstipation

activity was tested in rats.

MSTR 1

$$G1 = 84$$

G12 = S02

 $G13 = 91-84 \ 92-86 \ / \ 92-84 \ 91-86$

9910bg14

G14 = CH2

DER: and pharmaceutically acceptable salts

MPL: claim 1

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L10 ANSWER 14 OF 14 MARPAT COPYRIGHT 2002 ACS
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AN 112:235290 MARPAT

TI Preparation of 1,3-disubstituted pyrrolidines as serotonin (partial) agonists and antagonists

IN Schohe, Rudolf; Seidel, Peter Rudolf; Traber, Jorg; Glaser, Thomas

PA Bayer A.-G., Fed. Rep. Ger.

SO Eur. Pat. Appl., 50 pp. CODEN: EPXXDW

DT Patent

LA German

FAN.CNT 2													
	PA'		KIND	DATE		APPLICATION NO.	DATE						
PI		338331	A1			EP 1989-106023	19890406						
		338331											
						GR, IT, LI, NL, SE							
						DE 1988-3835291							
						AT 1989-106023							
						ES 1989-106023							
	US	5037841	Α	19910806		US 1989-336977	19890412						
						AU 1989-33059	19890414						
	AU	625817											
		89973				IL 1989-89973							
						DK 1989-1864							
						JP 1989-96549							
	ZA	8902823	Α	19891227		ZA 1989-2823	19890418						
	US	5274097	Α	19931228		US 1991-682785	19910409						
	US	5453437	Α	19950926		US 1993-118376	19930908						
PRAI	DE	1988-3812989	19880	419									
	DE	1988-3835291	19881	015									
	EP	1989-106023	19890	406									
	US	1989-336927	19890	412									
	US	1989-336977	19890	412									
	US	1991-682785	19910	409									
os	CAS	CASREACT 112:235290											
GI													

AB The title compds. [I; A = (fused) heteroaryl; B = cyano, CO2R1, CONR2R3, SO2NR2R3, SOmR4, NR5R6, C.tplbond.CCH2NR5R6; X = OCH2, CH2O, O; R1 = H, C1-12 alkyl, C5-8 cycloalkyl, C2-12 alkenyl, aryl, aralkyl; R2, R3 = H, C1-17 alkyl, (un)substituted aryl, etc.; R5, R6 = COR2, SO2R8, any of definitions for R2, R3; R7 = NHR9, C1-12 alkyl, C1-17 alkoxy, etc.; R8 = C5-8 cycloalkyl, (un)substituted C1-12 alkyl, (un)substituted (hetero)aryl, NR2R3; R9 = H, C5-8 cycloalkyl, (un)substituted C1-12 alkyl,

aralkyl, (hetero)aryl, etc.; NR5R6 can form a (fused) heterocyclic ring, e.g., Q1, Q2, etc.; n=1-10; n=0-2] and their salts were prepd. as 5-hydroxytryptamine agonists, partial agonists (no data), and antagonists,

useful for treatment of serotoninergic system-related CNS diseases. A mixt. of 3-(2-cyanophenoxy)pyrrolidine, 2-(4-bromobutyl)benzothiazol-3(2H)-

one-1,1-dioxide, and Et3N in DMF was stirred 20 h at 45.degree. to give II

which was converted to its oxalate. The latter in vitro antagonized serotonin with an inhibition const. Ki = 2 nM.

MSTR 1D

G3 = 151

G4 = alkylene < EC (1-10) C, DC (0) M3>

G5 = (0-2) CH2 DER: and salts MPL: claim 1 L15 ANSWER 1 OF 12 CAPLUS COPYRIGHT 2002 ACS

AN 2000:395926 CAPLUS

DN 133:129514

TI 2H-Thieno[3,2-e]- and [2,3-e]-1,2-thiazine-6-sulfonamide 1,1-dioxides as ocular hypotensive agents: synthesis, carbonic anhydrase inhibition and evaluation in the rabbit

AU Chen, H.-H.; Gross, S.; Liao, J.; McLaughlin, M.; Dean, T.; Sly, W. S.; May, J. A.

CS Ophthalmic Products Research, Alcon Research, Ltd., Fort Worth, TX, 76134,

USA

SO Bioorganic & Medicinal Chemistry (2000), 8(5), 957-975 CODEN: BMECEP; ISSN: 0968-0896

PB Elsevier Science Ltd.

DT Journal

LA English

AB Novel non-chiral 2H-thieno[3,2-e]- and [2,3-e]-1,2-thiazine-6-sulfonamide

1,1-dioxides were synthesized for evaluation as potential candidates for the treatment of glaucoma. All of the compds. prepd. were potent high affinity inhibitors of human carbonic anhydrase II, Ki<0.5 nM. Addnl., inhibition of recombinant human carbonic anhydrase IV was detd. for selected compds.; these were shown to be moderate to potent inhibitors

of

this isoenzyme with IC50 values ranging from 4.25 to 73.6 nM. Of the compds. evaluated for their ability to lower intraocular pressure in naturally hypertensive Dutch-belted rabbits, several showed significant efficacy (>20% decrease) in this model following topical ocular administration.

IT 171272-69-8P 171272-77-8P 171272-87-0P

RL: BAC (Biological activity or effector, except adverse); BSU (Biological

study, unclassified); PRP (Properties); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(thieno and thiazine sulfonamide dioxides as ocular hypotensive agents:

synthesis and carbonic anhydrase inhibition)

RN 171272-69-8 CAPLUS

CN 2H-Thieno[3,2-e]-1,2-thiazine-6-sulfonamide, 2-[2-(4-morpholinyl)ethyl]-

1,1-dioxide, monohydrochloride (9CI) (CA INDEX NAME)

HC1

RN 171272-77-8 CAPLUS

CN Piperazine, 1-acetyl-4-[2-[6-(aminosulfonyl)-1,1-dioxido-2H-thieno[3,2-

e]-

1,2-thiazin-2-yl]ethyl]- (9CI) (CA INDEX NAME)

RN 171272-87-0 CAPLUS

CN 2H-Thieno[3,2-e]-1,2-thiazine-6-sulfonamide, 2-[4-(4-morpholinyl)-2-butenyl]-, 1,1-dioxide, monohydrochloride (9CI) (CA INDEX NAME)

HC1

IT 171273-55-5P 171273-66-8P 286958-36-9P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent) (thieno and thiazine sulfonamide dioxides as ocular hypotensive agents: synthesis and carbonic anhydrase inhibition)

RN 171273-55-5 CAPLUS

CN Piperazine, 1-acetyl-4-[2-[6-[[(1,1-dimethylethyl)amino]sulfonyl]-1,1-dioxido-2H-thieno[3,2-e]-1,2-thiazin-2-yl]ethyl]- (9CI) (CA INDEX NAME)

RN 171273-66-8 CAPLUS

CN 2H-Thieno[3,2-e]-1,2-thiazine-6-sulfonamide, N-(1,1-dimethylethyl)-2-[4-(4-morpholinyl)-2-butenyl]-, 1,1-dioxide (9CI) (CA INDEX NAME)

RN 286958-36-9 CAPLUS

CN 2H-Thieno[3,2-e]-1,2-thiazine-6-sulfonamide, N-(1,1-dimethylethyl)-2-[2-(4-morpholinyl)ethyl]-, 1,1-dioxide (9CI) (CA INDEX NAME)

RE.CNT 25 THERE ARE 25 CITED REFERENCES AVAILABLE FOR THIS RECORD ALL CITATIONS AVAILABLE IN THE RE FORMAT

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L15 ANSWER 2 OF 12 CAPLUS COPYRIGHT 2002 ACS
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AN 1999:449035 CAPLUS

DN 131:116257

TI Preparation of pyrrole sulfonamide derivatives as serotonin-2 receptor antagonists

IN Mizuno, Akira; Shibata, Makoto; Iwamori, Chie; Fukami, Harukazu; Inomata,

Norio

PA Suntory, Ltd., Japan

SO Jpn. Kokai Tokkyo Koho, 31 pp.

CODEN: JKXXAF

DT Patent

LA Japanese

FAN.CNT 1

	PATENT NO.			KI	ND	2 19990721		APPLICATION NO.					ο.	19971226				
PI		11193289 9933840																
	WO	9933840		A	A3 19990		0910											
		W:	ΑU,	CA,	CN,	HU,	KR,	US										
		RW:	AT,	BE,	CH,	CY,	DE,	DK,	ES,	FI,	FR,	GB,	GR,	IE,	IT,	LU,	MC,	NL,
			PT,	SE														
	AU			A.	1	19990719			AU 1999-1690					1998	1225			
	EΡ			A.	A2 2000011		0112		EP	EP 1998-961598				19981225				
		R:	ΑT,	ΒE,	CH,	DE,	DK,	ES,	FR,	GB,	GR,	IT,	LI,	LU,	NL,	SE,	MC,	PT,
			ΙE,	FI														
	US	S 6271223		B:	1	20010807			US 1999-367841			1	19990826					
	US	US 2002040017		A.	1	20020404			US 2001-871655			5	20010604					
PRAI	JP	1997	-366	756	Α		1997	1226										
	WO	WO 1998-JP5954		W		19981225												
	US	1999	-367	841	A.	3	1999	0826										
os	MARPAT 131:116257																	
GI																		

$$Q = N D X F$$

Ι

AB Title compds. [I; A = CH, NMe; B = NMe, CH; dotted bonds = single, double; m = 0, 1; D = CH, N; X = bond, CO; Y-Z = :0, :NOH; Y = H; Z = OH; R = CH2CH2CH2Q] and their salts are prepd. as serotonin 2 receptor antagonists on treatment of circulatory system disease with low side effect. Thus, the title compd. I (A = CH; B = NMe; m = 1; D = N; Y-Z = :0; X = bond; dotted bonds were single and double related to B) was prepd. and tested for anti-5-HT and anti-.alpha.1 actions in guinea pig. IT 232619-90-8P

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); RCT (Reactant); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation); RACT (Reactant or reagent) (prepn. of pyrrolothiazinones and

pyrrolothiazepinones as serotonin-2 receptor antagonists)

RN 232619-90-8 CAPLUS

CN Pyrrolo[2,3-e]-1,2-thiazin-4(5H)-one, 2-[3-[4-(4-fluorophenyl)-1-piperazinyl]propyl]-2,3-dihydro-5-methyl-, 1,1-dioxide (9CI) (CA INDEX NAME)

IT 232619-94-2P 232619-95-3P 232619-98-6P

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation)

(prepn. of pyrrolothiazinones and pyrrolothiazepinones as serotonin-2 receptor antagonists)

RN 232619-94-2 CAPLUS

CN Pyrrolo[2,3-e]-1,2-thiazin-4(5H)-one, 2-[3-[4-(4-fluorophenyl)-1-piperazinyl]propyl]-2,3-dihydro-5-methyl-, oxime, 1,1-dioxide (9CI) (CA INDEX NAME)

RN 232619-95-3 CAPLUS

CN Pyrrolo[2,3-e]-1,2-thiazin-4(5H)-one, 2-[3-[4-(4-fluorobenzoyl)-1-piperidinyl]propyl]-2,3-dihydro-5-methyl-, 4-oxime, 1,1-dioxide (9CI) (CA INDEX NAME)

RN 232619-98-6 CAPLUS

CN Pyrrolo[2,3-e]-1,2-thiazin-4-ol, 2-[3-[4-(4-fluorophenyl)-1-piperazinyl]propyl]-2,3,4,5-tetrahydro-5-methyl-, 1,1-dioxide (9CI) (CA INDEX NAME)

L15 ANSWER 3 OF 12 CAPLUS COPYRIGHT 2002 ACS

AN 1997:257352 CAPLUS

DN 126:238385

TI Preparation of novel pyrido[3,2-e]-1,2-thiazine derivative as psychotropic

agent

IN Malinka, Wieslaw; Kleinrok, Zdzislaw; Sieklucka, Maria

PA Akademia Medyczna, Pol.

SO Pol., 3 pp.

CODEN: POXXA7

DT Patent

LA Polish

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI GI	PL 170394	B1	19961231	PL 1993-299530	19930701

AB The title compd. I, useful as psychotropic agent, was prepd. in 56% yield

by reaction of 2H-3-acetyl-4-hydroxy-5,7-dimethylpyrido[3,2-e]-1,2-thiazine 1,1-dioxide with 1-chloro-3-(4-phenyl-1-piperazinyl)propane in the presence of NaOEt in EtOH. Compd. I showed LD50 of 1753.9 mg/kg, and,

e.g., decreased spontaneous mobility in mice at 1/80 LD50.

IT 164357-31-7P

RL: BAC (Biological activity or effector, except adverse); BSU (Biological

study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use);

BIOL (Biological study); PREP (Preparation); USES (Uses) (prepn. of novel pyrido[3,2-e]-1,2-thiazine deriv. as psychotropic agent)

RN 164357-31-7 CAPLUS

CN Ethanone, 1-[4-hydroxy-5,7-dimethyl-1,1-dioxido-2-[3-(4-phenyl-1-piperazinyl)propyl]-2H-pyrido[3,2-e]-1,2-thiazin-3-yl]- (9CI) (CA INDEX NAME)

L15 ANSWER 4 OF 12 CAPLUS COPYRIGHT 2002 ACS

AN 1997:257351 CAPLUS

DN 126:238384

TI Preparation of novel pyrido[3,2-e]-1,2-thiazine as psychotropic agent

IN Malinka, Wieslaw; Kleinrok, Zdzislaw; Sieklucka, Maria

PA Akademia Medyczna, Pol.

SO Pol., 4 pp.

CODEN: POXXA7

DT Patent

LA Polish

FAN.CNT 1

and,

RN

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI GI	PL 170371	B1	19961231	PL 1993-299532	19930701

AB The title compd. I, useful as psychotropic agent, was prepd. in 60% yield

Ι

by reaction of 2H-3-benzoyl-4-hydroxy-5,7-dimethylpyrido[3,2-e]-1,2-thiazine 1,1-dioxide with 1-chloro-3-(4-phenyl-1-piperazinyl)propane in the presence of NaOEt in EtOH. Compd. I showed LD50 of > 2000 mg/kg,

e.g., decreased spontaneous mobility in mice and rats at $1/40\ \text{LD50}$. IT 164357-32-8P

RL: BAC (Biological activity or effector, except adverse); BSU (Biological

study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use);

BIOL (Biological study); PREP (Preparation); USES (Uses) (prepn. of novel pyrido[3,2-e]-1,2-thiazine as psychotropic agent) 164357-32-8 CAPLUS

CN Methanone, [4-hydroxy-5,7-dimethyl-1,1-dioxido-2-[3-(4-phenyl-1-piperazinyl)propyl]-2H-pyrido[3,2-e]-1,2-thiazin-3-yl]phenyl- (9CI) (CA INDEX NAME)

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L15 ANSWER 5 OF 12 CAPLUS COPYRIGHT 2002 ACS
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AN 1996:486144 CAPLUS

DN 125:167999

TI Preparation of thienothiazinesulfonamides as carbonic anhydrase inhibitors.

IN May, Jesse A.; Chen, Hwang-hsing; Dupr, E. Brian; Dean, Thomas R.

PA Alcon Laboratories, Inc., USA

SO U.S., 33 pp., Cont.-in-part of U.S. Ser. No. 184,430, abandoned. CODEN: USXXAM

DT Patent

LA English

FAN.CNT 2

with

L MIN.	CIVIZ				
	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	US 5538966	Α	19960723	US 1995-374470	19950120
	WO 9622099	A1	19960725	WO 1995-US9144	19950720
	W: AU, CA,	JP, US			
	RW: AT, BE,	CH, DE	, DK, ES, FR,	GB, GR, IE, IT, LU	, MC, NL, PT, SE
	AU 9531370	A1	19960807	AU 1995-31370	19950720
PRAI	US 1994-184430		19940121		
	US 1995-374470		19950120		
	WO 1995-US9144		19950720		
os	MARPAT 125:1679	99			
GT					

$$\begin{array}{c} \text{N (CH2CH2OMe) 2} \\ \text{N SO2NH2} \\ \text{I OMe} \end{array}$$

AB Title compds. [I; G, J and the C atoms they are connected to = Q1, Q2; Y $\overline{}$

H, (substituted) alkyl, alkenyl, alkynyl; Z = carboxymethyl, cyanomethyl,

aminocarbonylmethyl, (substituted) alkyl, alkenyl, alkynyl, Ph, etc.; n

0-2], were prepd. for treatment of glaucoma (no data). Thus, $N-[[3-(1,3-\text{dioxolan}-2-y1)-2-\text{thienyl}] \cdot N-(4-\text{methoxyphenylmethyl})$ glycine Et ester (prepn. given) was refluxed 3 h

p-toluenesulfonic acid in acetone to give Et 2-(4-methoxyphenylmethyl)-

2H-

thieno[3,2-e]-1,2-thiazine-3-carboxylate 1,1-dioxide, which was converted

to title compd. (II) in several steps. I drug formulations are given.

IT 171272-69-8P 171272-70-1P 171272-77-8P 171272-87-0P 180527-18-8P 180527-28-0P 180527-41-7P

RL: BAC (Biological activity or effector, except adverse); BSU (Biological

study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use);

BIOL (Biological study); PREP (Preparation); USES (Uses) (prepn. of thienothiazinesulfonamides as carbonic anhydrase inhibitors)

RN 171272-69-8 CAPLUS

CN 2H-Thieno[3,2-e]-1,2-thiazine-6-sulfonamide, 2-[2-(4-morpholinyl)ethyl]-

1,1-dioxide, monohydrochloride (9CI) (CA INDEX NAME)

● HCl

RN 171272-70-1 CAPLUS

CN 2H-Thieno[3,2-e]-1,2-thiazine-6-sulfonamide, 2-[2-(4-morpholinyl)ethyl]-

1,1-dioxide (9CI) (CA INDEX NAME)

RN 171272-77-8 CAPLUS

CN Piperazine, 1-acetyl-4-[2-[6-(aminosulfonyl)-1,1-dioxido-2H-thieno[3,2-e]-

1,2-thiazin-2-yl]ethyl]- (9CI) (CA INDEX NAME)

RN 171272-87-0 CAPLUS

CN 2H-Thieno[3,2-e]-1,2-thiazine-6-sulfonamide, 2-[4-(4-morpholinyl)-2-butenyl]-, 1,1-dioxide, monohydrochloride (9CI) (CA INDEX NAME)

● HCl

RN 180527-18-8 CAPLUS

CN 2H-Thieno[3,2-e]-1,2-thiazine-6-sulfonamide, 2-[4-(4-morpholinyl)-2-butenyl]-, 1,1-dioxide (9CI) (CA INDEX NAME)

RN 180527-28-0 CAPLUS

CN 2H-Thieno[3,2-e]-1,2-thiazine-6-sulfonamide, 3-(3,3-dimethyl-2-oxobutyl)-2-

[2-(4-morpholinyl)ethyl]-, 1,1-dioxide, monohydrochloride (9CI) (CA INDEX

NAME)

● HCl

RN 180527-41-7 CAPLUS

CN 2H-Thieno[3,2-e]-1,2-thiazine-6-sulfonamide, 2-(4-morpholinylmethyl)-3-

[4- (4-morpholinyl)phenyl]-, 1,1-dioxide, monohydrochloride (9CI) (CA INDEX NAME)

HC1

IT 171273-45-3P 171273-55-5P 171273-65-7P

171273-66-8P 171273-87-3P 171273-88-4P

180527-43-9P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation);

RACT

(Reactant or reagent)

(prepn. of thienothiazinesulfonamides as carbonic anhydrase inhibitors)

RN 171273-45-3 CAPLUS

CN 2H-Thieno[3,2-e]-1,2-thiazine, 6-chloro-2-[2-(4-morpholinyl)ethyl]-,

1,1-dioxide (9CI) (CA INDEX NAME)

RN 171273-55-5 CAPLUS

CN Piperazine, 1-acetyl-4-[2-[6-[[(1,1-dimethylethyl)amino]sulfonyl]-1,1-dioxido-2H-thieno[3,2-e]-1,2-thiazin-2-yl]ethyl]- (9CI) (CA INDEX NAME)

RN 171273-65-7 CAPLUS

CN 2H-Thieno[3,2-e]-1,2-thiazine-6-sulfonamide, N-(1,1-dimethylethyl)-3,4-dihydro-4-hydroxy-2-[4-(4-morpholinyl)-2-butenyl]-, 1,1-dioxide (9CI)

(CA

INDEX NAME)

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RN 171273-66-8 CAPLUS

CN 2H-Thieno[3,2-e]-1,2-thiazine-6-sulfonamide, N-(1,1-dimethylethyl)-2-[4-(4-

morpholinyl)-2-butenyl]-, 1,1-dioxide (9CI) (CA INDEX NAME)

RN 171273-87-3 CAPLUS

CN 2H-Thieno[3,2-e]-1,2-thiazine-3-methanol, 2-[2-(4-morpholinyl)ethyl]-, 1,1-dioxide (9CI) (CA INDEX NAME)

RN 171273-88-4 CAPLUS

CN 2H-Thieno[3,2-e]-1,2-thiazine-6-sulfonamide, 3-(hydroxymethyl)-2-[2-(4-morpholinyl)ethyl]-, 1,1-dioxide (9CI) (CA INDEX NAME)

RN 180527-43-9 CAPLUS

CN 2H-Thieno[3,2-e]-1,2-thiazine-3-carboxylic acid, 2-[2-(4-morpholinyl)ethyl]-, anhydride with acetic acid, 1,1-dioxide (9CI) (CA INDEX NAME)

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L15 ANSWER 6 OF 12 CAPLUS COPYRIGHT 2002 ACS
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AN 1995:975365 CAPLUS

DN 124:8833

TI Preparation and formulation of thienothiazinesulfonamides as carbonic anhydrase inhibitors

May, Jesse Albert; Chen, Hwang-Hsing; Dupre, Brian; Dean, Thomas R. IN

Alcon Laboratories, Inc., USA PA

PCT Int. Appl., 116 pp. SO

CODEN: PIXXD2

Patent DT

English LΑ

FAN.CNT 2

PATENT NO. KIND DATE APPLICATION NO. DATE ____ _____ WO 9519981 19950727 WO 1995-US775 PΙ A1 19950120 W: AU, CA, JP, MX RW: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE AU 9516848 A1 19950808 AU 1995-16848 19950120 PRAI US 1994-184430 19940121 WO 1995-US775 19950120 os MARPAT 124:8833 GI

AB Title compds. [I; GJ = (un)substituted CH:CHNRSOn, -SOnNRCH:CH; R = (un) substituted alk(en)yl, CH2CO2H, alkoxycarbonylmethyl, CH2CONH2, heteroaryl, etc.; n = 0-2] were prepd. as carbonic anhydrase inhibitors (no data). Thus, 3-acetyl-2-thiophenesulfonamide (prepn. given) was brominated and the product cyclized to give 3,4-dihydro-2H-thieno[3,2el-

1,2-thiazin-4-ol 1,1-dioxide which was converted in 7 steps to title compd. II.

171272-69-8P 171272-70-1P 171272-77-8P IT 171272-87-0P 171272-88-1P 171273-00-0P 171273-01-1P

RL: BAC (Biological activity or effector, except adverse); BSU (Biological

study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use);

BIOL (Biological study); PREP (Preparation); USES (Uses)

(prepn. of thienothiazinesulfonamides as carbonic anhydrase inhibitors)

RN 171272-69-8 CAPLUS

CN 2H-Thieno[3,2-e]-1,2-thiazine-6-sulfonamide, 2-[2-(4-morpholinyl)ethyl]-

1,1-dioxide, monohydrochloride (9CI) (CA INDEX NAME)

● HCl

RN 171272-70-1 CAPLUS

CN 2H-Thieno[3,2-e]-1,2-thiazine-6-sulfonamide, 2-[2-(4-morpholinyl)ethyl]-

1,1-dioxide (9CI) (CA INDEX NAME)

RN 171272-77-8 CAPLUS

CN Piperazine, 1-acetyl-4-[2-[6-(aminosulfonyl)-1,1-dioxido-2H-thieno[3,2-

e]1,2-thiazin-2-yl]ethyl]- (9CI) (CA INDEX NAME)

RN 171272-87-0 CAPLUS

CN 2H-Thieno[3,2-e]-1,2-thiazine-6-sulfonamide, 2-[4-(4-morpholinyl)-2-butenyl]-, 1,1-dioxide, monohydrochloride (9CI) (CA INDEX NAME)

● HCl

RN 171272-88-1 CAPLUS

CN 2H-Thieno[3,2-e]-1,2-thiazine-6-sulfonamide, 2-[4-(4-morpholinyl)butyl]-

1,1-dioxide (9CI) (CA INDEX NAME)

RN 171273-00-0 CAPLUS

CN 2H-Thieno[3,2-e]-1,2-thiazine-6-sulfonamide, 3-[(acetyloxy)methyl]-2-[2-(4-

morpholinyl)ethyl]-, 1,1-dioxide, monohydrochloride (9CI) (CA INDEX NAME)

● HCl

RN 171273-01-1 CAPLUS

CN 2H-Thieno[3,2-e]-1,2-thiazine-6-sulfonamide, 3-[(acetyloxy)methyl]-2-[2-(4-

morpholinyl)ethyl]-, 1,1-dioxide (9CI) (CA INDEX NAME)

IT 171273-45-3P 171273-55-5P 171273-65-7P

171273-66-8P 171273-86-2P 171273-87-3P

171273-88-4P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation);

RACT

(Reactant or reagent)

(prepn. of thienothiazinesulfonamides as carbonic anhydrase inhibitors)

RN 171273-45-3 CAPLUS

CN 2H-Thieno[3,2-e]-1,2-thiazine, 6-chloro-2-[2-(4-morpholinyl)ethyl]-, 1,1-dioxide (9CI) (CA INDEX NAME)

RN 171273-55-5 CAPLUS

CN Piperazine, 1-acetyl-4-[2-[6-[[(1,1-dimethylethyl)amino]sulfonyl]-1,1-dioxido-2H-thieno[3,2-e]-1,2-thiazin-2-yl]ethyl]- (9CI) (CA INDEX NAME)

RN 171273-65-7 CAPLUS

CN 2H-Thieno[3,2-e]-1,2-thiazine-6-sulfonamide, N-(1,1-dimethylethyl)-3,4-dihydro-4-hydroxy-2-[4-(4-morpholinyl)-2-butenyl]-, 1,1-dioxide (9CI)

(CA INDEX NAME)

RN 171273-66-8 CAPLUS

CN 2H-Thieno[3,2-e]-1,2-thiazine-6-sulfonamide, N-(1,1-dimethylethyl)-2-[4-(4-

morpholinyl)-2-butenyl]-, 1,1-dioxide (9CI) (CA INDEX NAME)

RN 171273-86-2 CAPLUS

CN 2H-Thieno[3,2-e]-1,2-thiazine-3-carboxylic acid, 2-[2-(4-morpholinyl)ethyl]-, methyl ester, 1,1-dioxide (9CI) (CA INDEX NAME)

RN 171273-87-3 CAPLUS

CN 2H-Thieno[3,2-e]-1,2-thiazine-3-methanol, 2-[2-(4-morpholinyl)ethyl]-, 1,1-dioxide (9CI) (CA INDEX NAME)

RN 171273-88-4 CAPLUS

CN 2H-Thieno[3,2-e]-1,2-thiazine-6-sulfonamide, 3-(hydroxymethyl)-2-[2-(4-morpholinyl)ethyl]-, 1,1-dioxide (9CI) (CA INDEX NAME)

L15 ANSWER 7 OF 12 CAPLUS COPYRIGHT 2002 ACS

AN 1995:418701 CAPLUS

DN 123:55786

TI Studies on synthesis and biological properties of pyrazolo[4,3-c]pyrido[3,2-e]-1,2-thiazine 5,5-dioxide bearing 4-substituted-1-piperazinylpropyl moiety

AU Malinka, Wieslaw; Sieklucka-Dziuba, Maria; Rajtar-Cynke, Grazyna; Borowicz, Kinga; Kleinrok, Zdzislaw

CS Dep. Drug Chem., Wroclaw Univ. Med., Wroclaw, 50-137, Pol.

SO Farmaco (1994), 49(12), 783-92 CODEN: FRMCE8

DT Journal

LA English

GΙ

AB Pyrazolopyridothiazine 5,5-dioxides (I, R = Me, Ph; X = Y = CH, N; X = CH)

N, Y = CH) and pyridothiazine 1,1-dioxides (II, R = Me, Ph; X = Y = CH, N; X

= N, Y = CH) bearing 1-piperazinylpropyl substituents were synthesized.

The acute toxicity and preliminary results on the CNS activity of I and II

are described. A structure-activity relationship is discussed.

IT 164357-31-7P

RL: BAC (Biological activity or effector, except adverse); RCT (Reactant);

SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation) (synthesis and CNS activity of pyrazolopyridothiazine dioxides)

RN 164357-31-7 CAPLUS

CN Ethanone, 1-[4-hydroxy-5,7-dimethyl-1,1-dioxido-2-[3-(4-phenyl-1-piperazinyl)propyl]-2H-pyrido[3,2-e]-1,2-thiazin-3-yl]- (9CI) (CA INDEX NAME)

IT 164357-32-8P

RL: BAC (Biological activity or effector, except adverse); SPN (Synthetic

preparation); BIOL (Biological study); PREP (Preparation)
 (synthesis and CNS activity of pyrazolopyridothiazine dioxides)

RN 164357-32-8 CAPLUS

CN Methanone, [4-hydroxy-5,7-dimethyl-1,1-dioxido-2-[3-(4-phenyl-1-piperazinyl)propyl]-2H-pyrido[3,2-e]-1,2-thiazin-3-yl]phenyl- (9CI) (CA INDEX NAME)

IT 164357-39-5P 164357-40-8P

RL: SPN (Synthetic preparation); PREP (Preparation) (synthesis and CNS activity of pyrazolopyridothiazine dioxides)

RN 164357-39-5 CAPLUS

CN Methanone, [4-hydroxy-5,7-dimethyl-1,1-dioxido-2-[3-[4-(2-pyridinyl)-1-piperazinyl]propyl]-2H-pyrido[3,2-e]-1,2-thiazin-3-yl]phenyl- (9CI) (CA INDEX NAME)

RN 164357-40-8 CAPLUS

CN Methanone, [4-hydroxy-5,7-dimethyl-1,1-dioxido-2-[3-[4-(2-pyrimidinyl)-1-piperazinyl]propyl]-2H-pyrido[3,2-e]-1,2-thiazin-3-yl]phenyl- (9CI) (CA INDEX NAME)

L15 ANSWER 8 OF 12 CAPLUS COPYRIGHT 2002 ACS

AN 1994:534056 CAPLUS

DN 121:134056

TI Synthesis of some amides of 4-hydroxy-5,7-dimethyl-2H-pyrido[3,2-e]-1,2-thiazine-2-acetic acid 1,1-dioxide

AU Malinka, W.; Deren, A.

CS Dep. Chem. Drugs, Sch. Med., Wroclaw, 50-137, Pol.

SO Pol. J. Chem. (1992), 66(12), 1953-60 CODEN: PJCHDQ; ISSN: 0137-5083

DT Journal

LA English

GΙ

AB 3-Acetyl(benzoyl)-4-hydroxy-5,7-dimethyl-2H-pyrido[3,2-e]-1,2-thiazine-2-

acetic acid 1,1-dioxides I (R = Me, Ph; R1 = OH) react on treatment with SOC12 and alkylamine to yield the title amides I (R = Me, Ph; R1 = cyclohexylamino, piperidino, butylamino, allylamino) with potential antiinflammatory activity. In reaction of acid I (R = Me; R1 = OH) with primary n-alkylamines amido-enamines II (R2 = Bu, allyl, Me) were obtained

unexpectedly.

IT 157253-66-2P 157253-70-8P

RL: SPN (Synthetic preparation); PREP (Preparation)
 (prepn. of)

RN 157253-66-2 CAPLUS

CN Piperidine, 1-[(3-acetyl-4-hydroxy-5,7-dimethyl-1,1-dioxido-2H-pyrido[3,2-e]-1,2-thiazin-2-yl)acetyl]- (9CI) (CA INDEX NAME)

RN 157253-70-8 CAPLUS

CN Piperidine, 1-[(3-benzoyl-4-hydroxy-5,7-dimethyl-1,1-dioxido-2H-pyrido[3,2-e]-1,2-thiazin-2-yl)acetyl]- (9CI) (CA INDEX NAME)

L15 ANSWER 9 OF 12 CAPLUS COPYRIGHT 2002 ACS

AN 1994:245133 CAPLUS

DN 120:245133

TI Heterocyclic sulfonamides useful as carbonic anhydrase inhibitors for treatment of glaucoma

IN Dean, Thomas R.; Chen, Hwang Hsing; May, Jesse A.

PA Alcon Laboratories, Inc., USA

SO U.S., 30 pp. Cont.-in-part of U.S. 5,153,192. CODEN: USXXAM

DT Patent

LA English

FAN.CNT 4

1744.	CIVI				
	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	US 5240923	Α	19930831	US 1991-775313	19911009
	US 5153192	Α	19921006	US 1990-618765	19901127
	US 5378703	Α	19950103	US 1993-19011	19930218
	US 5679670	Α	19971021	US 1994-357623	19941215
	US 5585377	Α	19961217	US 1994-362716	19941223
PRAI	US 1990-506780	B2	19900409		
	US 1990-618765	A2	19901127		
	US 1990-506730	В2	19900409		
	US 1991-775313	A2	19911009		
	US 1993-19011	A 3	19930218		
os	MARPAT 120:24513	3			
GT					

$$R^{1}R^{2}N-G$$
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AB Sulfonamides I [R1 = H, (un)substituted alkyl; R2 = H, (un)substituted alkyl, alkenyl, alkynyl, phenylalkyl, heteroarylalkyl, alkoxy, Ph, heteroaryl; or R1R2 may form (un)substituted satd. 5- or 6-membered ring contg. O, S, C, or N; both R1 and R2 .noteq. H; R3 = H, halo, (un)substituted alkyl, alkoxy, alkylthio; or R1R3 may = C atoms to form (un)substituted 5- to 7-membered ring; G = CO, SO2] were prepd. as carbonic anhydrase inhibitors for lowering intraocular pressure (no data).

For example, 3,4-dihydro-4-hydroxy-2H-thieno[3,2-e]-1,2-thiazine 1,1-dioxide (prepn. given) underwent a sequence of O-protection, lithiation, introduction of a 6-(N-tert-butyl)sulfamoyl group, O-deprotection, N-alkylation of the thiazine nucleus with BrCH2CH2Br, further condensation of the bromoethyl group with 1-acetylpiperazine,

removal of the tert-Bu group, to give title compd. II, isolated as the maleate.

IT 138890-54-7P 154127-36-3P

and

RL: SPN (Synthetic preparation); PREP (Preparation) (prepn. of, as intermediate for carbonic anhydrase inhibitors)

RN 138890-54-7 CAPLUS

CN 2H-Thieno[3,2-e]-1,2-thiazine-6-sulfonamide, 3,4-dihydro-4-hydroxy-2-[2-(4-

morpholinyl)ethyl]-, 1,1-dioxide (9CI) (CA INDEX NAME)

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RN 154127-36-3 CAPLUS

CN Acetamide, N-[6-(aminosulfonyl)-3,4-dihydro-2-[2-(4-morpholinyl)ethyl]-1,1-

dioxido-2H-thieno[3,2-e]-1,2-thiazin-4-yl]- (9CI) (CA INDEX NAME)

IT 138890-72-9P 154127-10-3P 154127-11-4P

154127-14-7P 154127-15-8P 154127-16-9P

154127-17-0P

RL: SPN (Synthetic preparation); PREP (Preparation) (prepn. of, for lowering intraocular pressure)

RN 138890-72-9 CAPLUS

CN 2H-Thieno[3,2-e]-1,2-thiazine-6-sulfonamide, 3,4-dihydro-4-hydroxy-2-[2-

(4 -

morpholinyl)ethyl]-, 1,1-dioxide, monohydrochloride (9CI) (CA INDEX NAME)

● HCl

RN 154127-10-3 CAPLUS

CN Piperazine, 1-acetyl-4-[2-[6-(aminosulfonyl)-3,4-dihydro-4-hydroxy-1,1-dioxido-2H-thieno[3,2-e]-1,2-thiazin-2-yl]ethyl]- (9CI) (CA INDEX NAME)

RN 154127-11-4 CAPLUS

CN Piperazine, 1-acetyl-4-[2-[6-(aminosulfonyl)-3,4-dihydro-4-hydroxy-1,1-dioxido-2H-thieno[3,2-e]-1,2-thiazin-2-yl]ethyl]-, (2Z)-2-butenedioate (1:1) (salt) (9CI) (CA INDEX NAME)

CM 1

CRN 154127-10-3 CMF C14 H22 N4 O6 S3

$$\begin{array}{c|c}
N - CH_2 - CH_2 - N \\
N - CH_2 - CH$$

CM 2

CRN 110-16-7 CMF C4 H4 O4 CDES 2:Z

Double bond geometry as shown.

RN 154127-14-7 CAPLUS

CN 2H-Thieno[3,2-e]-1,2-thiazine-6-sulfonamide, 3,4-dihydro-4-hydroxy-2-[2-(1H-imidazol-1-yl)ethyl]-, 1,1-dioxide, monohydrochloride (9CI) (CA INDEX

NAME)

● HCl

RN 154127-15-8 CAPLUS

CN 2H-Thieno[3,2-e]-1,2-thiazine-6-sulfonamide, 3,4-dihydro-4-hydroxy-2-[2-(1H-imidazol-1-yl)ethyl]-, 1,1-dioxide (9CI) (CA INDEX NAME)

$$N \longrightarrow CH_2 - CH_2 \longrightarrow N \longrightarrow S \longrightarrow S \longrightarrow N \longrightarrow N \longrightarrow N$$

RN 154127-16-9 CAPLUS

CN 2H-Thieno[3,2-e]-1,2-thiazine-6-sulfonamide, 4-(ethylamino)-3,4-dihydro-2-

[2-(4-morpholinyl)ethyl]-, 1,1-dioxide, monohydrochloride (9CI) (CA INDEX

NAME)

HC1

RN 154127-17-0 CAPLUS

CN 2H-Thieno[3,2-e]-1,2-thiazine-6-sulfonamide, 4-(ethylamino)-3,4-dihydro-2-[2-(4-morpholinyl)ethyl]-, 1,1-dioxide (9CI) (CA INDEX NAME)

```
L15 ANSWER 10 OF 12 CAPLUS COPYRIGHT 2002 ACS
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AN 1992:433673 CAPLUS

DN 117:33673

TI Thiophene sulfonamides useful as carbonic anhydrase inhibitors for the treatment of glaucoma

IN Dean, Thomas R.; Chen, Hwang Hsing; May, Jesse A.

PA Alcon Laboratories, Inc., USA

SO PCT Int. Appl., 82 pp. CODEN: PIXXD2

DT Patent

LA English

FAN.CNT 4

FAN.		_	NO.		KIN	1D	DATE				PLICATION		DATE
PI	WO										1991-US22		19910403
							JP,						
				-							GR, IT, LU		
											1990-6187		
											1991-2080		
										AU	1991-7746	57	19910403
	AU	6559	24		B2	2	1995	0119					
										EP	1991-9083	317	19910403
	EP	5278	01		B1	L	2002	0731					
		R:	ΑT,	BE,	CH,	DE,	DK,	ES,	FR,	GB,	GR, IT, LI	I, LU,	NL, SE
	BR	9106	330		Α		1993	0420		BR	1991-6330)	19910403
	JP	0550	8832		T2	2	1993	1209		JP	1991-5080	001	19910403
	JP	2562	394		B2	2	1996	1211					
	ZA	9102	580		Α		1992	0129		ZA	1991-2580)	19910408
	IL	9780	0		A1	L	1997	0814		IL	1991-9780	00	19910409
	NO	9203	948		Α		1992	1208		NO	1992-3948	3	19921009
	FI	9603	424		Α		1996	0902		FI	1996-3424	l	19960902
PRAI	US	1990	-506	730	Α		1990	0409					
	US	1990	-6187	765	Α		1990	1127					
	WO	1991	-US22	262	Α		1991	0403					
	FI	1992	-4553	3	Α		1992	1008					
os	MAF	RPAT	117:3	33673	3								

$$R^3$$
 SO_2NH_2 R^1R^2NG

GI

The title compds. [I; R1 = H, (un)substituted C1-4 alkyl; R2 = H, (un)substituted C1-8 alkyl, (un)substituted C3-7 alkynyl, Ph, heteroaryl, etc; R3 = H, halo, C1-4 alkyl, C1-8 alkoxy, C1-8 alkylthiol, etc; G = CO, SO2] and a pharmaceutically acceptable salt thereof are effective in lowering and controlling intraocular pressure. An ophthalmic suspension contained 3,4-dihydro-4-methoxy-2-methyl-2H-thieno[3,2-e]-1,2-thiazine-6-sulfonamide-1,1-dioxide (prepn. given) 3.0, hydroxypropyl Me cellulose 0.5, Na2HPO4 0.2, di-Na edetate 0.01, NaCl 0.8, benzalkonium chloride 0.01, polysorbate-80 0.1, NaOH/HCl q.s. to pH 7.02, and water to 100.00 %.

IT 138890-43-4 138890-54-7

RL: BIOL (Biological study)

(ophthalmic prepns. contg., for lowering intraocular pressure)

RN 138890-43-4 CAPLUS

CN 2H-Thieno[3,2-e]-1,2-thiazine-6-sulfonamide, 3,4-dihydro-4-methoxy-2-[2-(4-morpholinyl)ethyl]-, 1,1-dioxide (9CI) (CA INDEX NAME)

RN 138890-54-7 CAPLUS

CN 2H-Thieno[3,2-e]-1,2-thiazine-6-sulfonamide, 3,4-dihydro-4-hydroxy-2-[2-(4-morpholinyl)ethyl]-, 1,1-dioxide (9CI) (CA INDEX NAME)

IT 138891-00-6P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation) (prepn. and reaction of, in prepn. of thiophene sulfonamide for glaucoma treatment)

RN 138891-00-6 CAPLUS

CN 2H-Thieno[3,2-e]-1,2-thiazin-4-ol, 3,4-dihydro-2-[2-(4-morpholinyl)ethyl]-, 1,1-dioxide (9CI) (CA INDEX NAME)

IT 138890-72-9P

RL: PREP (Preparation) (prepn. of, as intraocular pressure lowering agent)

RN 138890-72-9 CAPLUS

CN 2H-Thieno[3,2-e]-1,2-thiazine-6-sulfonamide, 3,4-dihydro-4-hydroxy-2-[2-(4-morpholinyl)ethyl]-, 1,1-dioxide, monohydrochloride (9CI) (CA INDEX NAME)

● HC1

L15 ANSWER 11 OF 12 CAPLUS COPYRIGHT 2002 ACS

AN 1989:478013 CAPLUS

DN 111:78013

TI Preparation of 2-substituted derivatives of 2H-3-acyl-4-hydroxy-5,7-dimethylpyrido[3,2-e][1,2]thiazine 1,1-dioxides as analgesics

IN Malinka, Wieslaw; Zawisza, Tadeusz; Wilimowski, Marian

PA Akademia Medyczna Wroclaw, Pol.

SO Pol., 3 pp. CODEN: POXXA7

DT Patent

LA Polish

FAN.CNT 1

GI

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	PL 143077	B2	19880130	PL 1986-257400	19860107
os	CASREACT 111:780	13; MA	RPAT 111:78013		

AB Title compds. I (R = Me, Ph; R1 = alkyl, alkylaryl, alkylcarboxy, alkyl ester, alkylamido, alkenyl, alkoxycarbonyl), useful as analgesics (no data), were prepd. 2H-3-Acetyl-4-hydroxy-5,7-dimethylpyrido[3,2-e][1,2]thiazine 1,1-dioxide and MeI are added to NaOMe at room temp. followed by acidification with HOAc to give I (R = R1 = Me) in 60% yield.

IT 121879-81-0P

RL: BAC (Biological activity or effector, except adverse); SPN (Synthetic

preparation); THU (Therapeutic use); BIOL (Biological study); PREP
(Preparation); USES (Uses)

(prepn. of, as analgesic)

RN 121879-81-0 CAPLUS

CN Methanone, [4-hydroxy-5,7-dimethyl-2-[3-(4-methyl-1-piperazinyl)propyl]1,1-dioxido-2H-pyrido[3,2-e]-1,2-thiazin-3-yl]phenyl- (9CI) (CA INDEX NAME)

L15 ANSWER 12 OF 12 CAPLUS COPYRIGHT 2002 ACS

AN 1987:407141 CAPLUS

DN 107:7141

TI A novel system: 2H-pyrido[3,2-e]-1,2-thiazine-1,1-dioxide. Synthesis and properties of some derivatives

AU Zawisza, T.; Malinka, W.

CS Dep. Chem. Drug, Sch. Med., Wroclaw, Pol.

SO Farmaco, Ed. Sci. (1986), 41(10), 819-26 CODEN: FRPSAX; ISSN: 0430-0920

DT Journal

LA English

GI

AB Reactions of pyridoisothiazoline dioxides I (R = COMe, COPh) with NaOEt produced rearrangement to give pyridothiazine dioxides II (R1 = H).

N-Alkylation of II (R = COMe, COPh; R1 = H) gave II (R1 = Me, allyl, CH2Ph,CH2CO2Et,CH2COPh, CO2Me, etc.). Some II showed strong analgesic activity.

IT 108586-73-8P 108586-78-3P

RL: BAC (Biological activity or effector, except adverse); SPN (Synthetic

RN 108586-73-8 CAPLUS

CN Ethanone, 1-[4-hydroxy-5,7-dimethyl-2-[3-(4-methyl-1-piperazinyl)propyl]-1,1-dioxido-2H-pyrido[3,2-e]-1,2-thiazin-3-yl]-, dihydrochloride (9CI) (CA INDEX NAME)

Me
$$N$$
 $CH_2)_3$ N Me Me

●2 HC1

RN 108586-78-3 CAPLUS

CN Methanone, [4-hydroxy-5,7-dimethyl-2-[3-(4-methyl-1-piperazinyl)propyl]1,1-dioxido-2H-pyrido[3,2-e]-1,2-thiazin-3-yl]phenyl-, dihydrochloride
(9CI) (CA INDEX NAME)

●2 HC1

L18 ANSWER 1 OF 24 BEILSTEIN COPYRIGHT 2002 BEILSTEIN CDS MDL

Melting Point:

Value		1	Ref	. 1	Note	
(MP)		1		- [
(Cel)		1		-		
======	====	=+=	===	=+=		
108 -	112	1	1	ı	1	

Reference(s):

 Chen, Hwang-Hsing; Gross, Sharon; Liao, John; McLaughlin, Marsha; Dean, Tom; Sly, William S.; May, Jesse A., Bioorg.Med.Chem., CODEN: BMECEP, 8(5),

Notes(s):

1. Crystallization with 0.5 Mol(s) H2O

L18 ANSWER 2 OF 24 BEILSTEIN COPYRIGHT 2002 BEILSTEIN CDS MDL

Reference(s):

1. Chen, Hwang-Hsing; Gross, Sharon; Liao, John; McLaughlin, Marsha; Dean, Tom; Sly, William S.; May, Jesse A., Bioorg.Med.Chem., CODEN: BMECEP, 8(5),

<2000>, 957 - 975; BABS-6236312

Nuclear Magnetic Resonance:

NMR

Coupling Nuclei: 1H-1H

Solvents: dimethylsulfoxide-d6

Frequency: 200 MHz

Reference(s):

1. Chen, Hwang-Hsing; Gross, Sharon; Liao, John; McLaughlin, Marsha; Dean,

Tom; Sly, William S.; May, Jesse A., Bioorg.Med.Chem., CODEN: BMECEP, 8(5), <2000>, 957 - 975; BABS-6236312

L18 ANSWER 3 OF 24 BEILSTEIN COPYRIGHT 2002 BEILSTEIN CDS MDL

Beilstein Records (BRN): 8591587

Chemical Name (CN): methanesulfonic acid 6-tert-

butylsulfamoyl-2-

(4-morpholin-4-yl-but-2-enyl)-1,1-dioxo-1,2,3,4-tetrahydro-1.lambda.6-thieno<3,2-

e><1,2>thiazin-4-yl ester

Autonom Name (AUN): methanesulfonic acid 6-tert-

butylsulfamoyl-2-

(4-morpholin-4-yl-but-2-enyl)-1,1-dioxo-1,2,3,4-tetrahydro-1.lambda.6-thieno<3,2-

e><1,2>thiazin-4-yl ester

Molec. Formula (MF): C19 H31 N3 O8 S4

Molecular Weight (MW): 557.71

Lawson Number (LN): 31916, 30824, 3092, 2846, 2705

Compound Type (CTYPE): heterocyclic Constitution ID (CONSID): 7281929

Tautomer ID (TAUTID): 8095086
Entry Date (DED): 2000/10/24
Update Date (DUPD): 2000/10/24

L18 ANSWER 4 OF 24 BEILSTEIN COPYRIGHT 2002 BEILSTEIN CDS MDL

Nuclear Magnetic Resonance:

NMR

Coupling Nuclei:

1H-1H

Solvents:

dimethylsulfoxide-d6

Frequency:

200 MHz

Reference(s):

1. Chen, Hwang-Hsing; Gross, Sharon; Liao, John; McLaughlin, Marsha; Dean,

Tom; Sly, William S.; May, Jesse A., Bioorg.Med.Chem., CODEN: BMECEP, 8(5), <2000>, 957 - 975; BABS-6236312

L18 ANSWER 5 OF 24 BEILSTEIN COPYRIGHT 2002 BEILSTEIN CDS MDL

Beilstein Records (BRN): 8587001

Chemical Name (CN): 2-<2-(4-acetyl-piperazin-1-yl)-ethyl>-1,1-

dioxo-1,2-dihydro-1.lambda.6-thieno<3,2-</pre>

e><1,2>thiazine-6-sulfonic acid

tert-butylamide

Autonom Name (AUN): 2-<2-(4-acetyl-piperazin-1-yl)-ethyl>-1,1-

dioxo-1,2-dihydro-1.lambda.6-thieno<3,2-

e><1,2>thiazine-6-sulfonic acid

tert-butylamide

Molec. Formula (MF): C18 H28 N4 O5 S3

Molecular Weight (MW): 476.62

Lawson Number (LN): 31915, 28000, 3018, 2846, 1155

Compound Type (CTYPE): heterocyclic Constitution ID (CONSID): 7278087
Tautomer ID (TAUTID): 8084652
Entry Date (DED): 2000/10/24
Update Date (DUPD): 2000/10/24

Melting Point:

Value	Solvent	Ref.
(MP)	(.SOL)	1
(Cel)	1	1
=======	==+======	=====+====
180 - 183	3 methanol,	CH2C12 1

Reference(s):

 Chen, Hwang-Hsing; Gross, Sharon; Liao, John; McLaughlin, Marsha; Dean, Tom; Sly, William S.; May, Jesse A., Bioorg.Med.Chem., CODEN: BMECEP, 8(5),

<2000>, 957 - 975; BABS-6236312

L18 ANSWER 7 OF 24 BEILSTEIN COPYRIGHT 2002 BEILSTEIN CDS MDL

Nuclear Magnetic Resonance:

NMR

Coupling Nuclei: 1H-1H

Solvents: dimethylsulfoxide-d6

Frequency: 200 MHz

Reference(s):

1. Chen, Hwang-Hsing; Gross, Sharon; Liao, John; McLaughlin, Marsha;

Dean,

Tom; Sly, William S.; May, Jesse A., Bioorg.Med.Chem., CODEN: BMECEP, 8(5), <2000>, 957 - 975; BABS-6236312

NMR

Description: Chemical shifts

Nucleus: 1H

Solvents: dimethylsulfoxide-d6

Frequency: 200 MHz

Reference(s):

Chen, Hwang-Hsing; Gross, Sharon; Liao, John; McLaughlin, Marsha;

Dean,

Tom; Sly, William S.; May, Jesse A., Bioorg.Med.Chem., CODEN: BMECEP,

8(5), <2000>, 957 - 975; BABS-6236312 Beilstein Records (BRN): 8581743

Chemical Name (CN): N-(1,1-dimethylethyl)-2-<4-(4-dimethylethyl)

morpholinyl)-2-

butenyl>-2H-thieno<3,2-e>-1,2-thiazine-6-

sulfonamide 1,1-dioxide

Autonom Name (AUN): 2-(4-morpholin-4-yl-but-2-enyl)-1,1-dioxo-

1,2-dihydro-1.lambda.6-thieno<3,2e><1,2>thiazine-6-sulfonic acid

tert-butylamide

Molec. Formula (MF): C18 H27 N3 O5 S3

Molecular Weight (MW): 461.61

Lawson Number (LN): 31915, 30824, 3092, 2846

Compound Type (CTYPE): heterocyclic Constitution ID (CONSID): 7273593
Tautomer ID (TAUTID): 8072321
Entry Date (DED): 2000/10/24

Entry Date (DED): 2000/10/24 Update Date (DUPD): 2000/10/24

$$\begin{array}{c|c} & & & & & & & & & & & & & & & & \\ & & & & & & & & & & & & & & & \\ & & & & & & & & & & & & & \\ & & & & & & & & & & & \\ & & & & & & & & & & & \\ & & & & & & & & & & \\ & & & & & & & & & & \\ & & & & & & & & & \\ & & & & & & & & & \\ & & & & & & & & \\ & & & & & & & & \\ & & & & & & & & \\ & & & & & & & \\ & & & & & & & \\ & & & & & & & \\ & & & & & & & \\ & & & & & & \\ & & & & & & \\ & & & & & & \\ & & & & & & \\ & & & & & & \\ & & & & & & \\ & & & & & & \\ & & & & & & \\ & & & & & & \\ & & & & & & \\ & & & & & & \\ & & & & & \\ & & & & & & \\ & & & & & \\ & & & & & \\ & & & & & \\ & & & & & \\ & & & & & \\ & & & & & \\ & & & & \\ & & & & \\ & & & & \\ & & & & \\ & & & & \\ & & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & \\ & & & \\ & & & \\ & & \\ & & \\ & & & \\ & \\ & & \\ & \\ & & \\ & \\ & & \\ &$$

L18 ANSWER 8 OF 24 BEILSTEIN COPYRIGHT 2002 BEILSTEIN CDS MDL

Beilstein Records (BRN): 8579796

Chemical Name (CN): 2-(2-morpholin-4-yl-ethyl)-1,1-dioxo-1,2-

dihydro-1.lambda.6-thieno<3,2e><1,2>thiazine-6-sulfonic acid

tert-butylamide

Autonom Name (AUN): 2-(2-morpholin-4-yl-ethyl)-1,1-dioxo-1,2-

dihydro-1.lambda.6-thieno<3,2e><1,2>thiazine-6-sulfonic acid

tert-butylamide C16 H25 N3 O5 S3

Molec. Formula (MF): C16 H2: Molecular Weight (MW): 435.57

Lawson Number (LN): 31915, 30824, 3018, 2846

Compound Type (CTYPE): heterocyclic

Constitution ID (CONSID): 7271952
Tautomer ID (TAUTID): 8069545
Entry Date (DED): 2000/10/24
Update Date (DUPD): 2000/10/24

L18 ANSWER 9 OF 24 BEILSTEIN COPYRIGHT 2002 BEILSTEIN CDS MDL

Beilstein Records (BRN): 8578151

Chemical Name (CN): 2-<4-(4-morpholinyl)-2-butenyl>-2H-

thieno<3,2-e>-1,2-thiazine-6-sulfonamide

1,1-dioxide

Autonom Name (AUN): 2-(4-morpholin-4-yl-but-2-enyl)-1,1-dioxo-

1,2-dihydro-1.lambda.6-thieno<3,2-

e><1,2>thiazine-6-sulfonic acid amide

Molec. Formula (MF): C14 H19 N3 O5 S3

Molecular Weight (MW): 405.50

Lawson Number (LN): 31915, 30824, 3092

Compound Type (CTYPE): heterocyclic

Constitution ID (CONSID): 7270627
Tautomer ID (TAUTID): 8069292
Entry Date (DED): 2000/10/24
Update Date (DUPD): 2000/10/24

Reference(s):

 Chen, Hwang-Hsing; Gross, Sharon; Liao, John; McLaughlin, Marsha; Dean, Tom; Sly, William S.; May, Jesse A., Bioorg.Med.Chem., CODEN: BMECEP, 8(5),

<2000>, 957 - 975; BABS-6236312

Molec. Formula (MF):

Beilstein Records (BRN): 8572775

Chemical Name (CN): 2-<2-(4-morpholinyl)ethyl>-2H-thieno<3,2-

e>-

Autonom Name (AUN): 1,2-thiazine-6-sulfonamide 1,1-dioxide 2-(2-morpholin-4-yl-ethyl)-1,1-dioxo-1,2-

dihydro-1.lambda.6-thieno<3,2-

e><1,2>thiazine-6-sulfonic acid amide

C12 H17 N3 O5 S3

Molecular Weight (MW): 379.46

Lawson Number (LN): 31915, 30824, 3018

Compound Type (CTYPE): heterocyclic

Constitution ID (CONSID): 7266063
Tautomer ID (TAUTID): 8067316
Entry Date (DED): 2000/10/24
Update Date (DUPD): 2000/10/24

Melting Point:

Reference(s):

1. Malinka, Wieslaw; Sieklucka-Dziuba, Maria; Raitar-Cynke, Grazyna; Borowicz,

Kinga; Kleinrok, Zdzislaw, Farmaco, CODEN: FRMCE8, 49(12), <1994>, 783792;

BABS-5956551

Reference(s):

1. Malinka, Wieslaw; Sieklucka-Dziuba, Maria; Raitar-Cynke, Grazyna; Borowicz,

Kinga; Kleinrok, Zdzislaw, Farmaco, CODEN: FRMCE8, 49(12), <1994>, 783-792;

BABS-5956551

Nuclear Magnetic Resonance:

NMR

Description: Chemical shifts

Nucleus: 11

Reference(s):

 Malinka, Wieslaw; Sieklucka-Dziuba, Maria; Raitar-Cynke, Grazyna; Borowicz, Kinga; Kleinrok, Zdzislaw, Farmaco, CODEN: FRMCE8, 49(12), <1994>, 783-792; BABS-5956551

NMR

Description: Spin-spin coupling constants

Note(s): 1H-1H

Reference(s):

 Malinka, Wieslaw; Sieklucka-Dziuba, Maria; Raitar-Cynke, Grazyna; Borowicz, Kinga; Kleinrok, Zdzislaw, Farmaco, CODEN: FRMCE8, 49(12), <1994>, 783-792; BABS-5956551

Reference(s):

1. Malinka, Wieslaw; Sieklucka-Dziuba, Maria; Raitar-Cynke, Grazyna; Borowicz,

Kinga; Kleinrok, Zdzislaw, Farmaco, CODEN: FRMCE8, 49(12), <1994>, 783792;

BABS-5956551

Nuclear Magnetic Resonance:

NMR

Description: Chemical shifts Nucleus: 1H

Reference(s):

 Malinka, Wieslaw; Sieklucka-Dziuba, Maria; Raitar-Cynke, Grazyna; Borowicz, Kinga; Kleinrok, Zdzislaw, Farmaco, CODEN: FRMCE8, 49(12), <1994>, 783-792; BABS-5956551

Reference(s):

1. Malinka, Wieslaw; Sieklucka-Dziuba, Maria; Raitar-Cynke, Grazyna; Borowicz,

Kinga; Kleinrok, Zdzislaw, Farmaco, CODEN: FRMCE8, 49(12), <1994>, 783792;

BABS-5956551

Value	Solvent	Ref.
(MP)	(.SOL)	1
(Cel)	l	1
	==+======	=+===
256 - 258	3 ethanol	1 1

Reference(s):

1. Zawisza, T.; Malinka, W., Farmaco Ed.Sci., CODEN: FRPSAX, 41(10), <1986>, 819-826; BABS-5913809

Infrared Spectrum:

Descript	t Solven	t Ref.	Note
ion	1	ı	1
(.KW)	(.SOL)	ı	1
	==+=====	===+====	+======
Bands	KBr	1	1

Reference(s):

1. Zawisza, T.; Malinka, W., Farmaco Ed.Sci., CODEN: FRPSAX, 41(10), <1986>, 819-826; BABS-5913809

Reference(s):

1. Zawisza, T.; Malinka, W., Farmaco Ed.Sci., CODEN: FRPSAX, 41(10), <1986>, 819-826; BABS-5913809

Infrared Spectrum:

Descript	1	Solvent	I	₹ef.		Note	
ion	1				1		
(.KW)	1	(.SOL)			1		
========	=+=		=+=	-===	+=		
Bands	1	KBr	1	1	ı	1	

Reference(s):

1. Zawisza, T.; Malinka, W., Farmaco Ed.Sci., CODEN: FRPSAX, 41(10), <1986>, 819-826; BABS-5913809

Notes(s):

1. 3480 - 1160 cm**(-1)

Reference(s):

 Malinka, W.; Deren, A., Pol.J.Chem., CODEN: PJCHDQ, 66(12), <1992>, 1953-1960; BABS-5713285

Nuclear Magnetic Resonance:

NMR

Description: Chemical shifts

Nucleus: 1H Solvents: CDCl3

Reference(s):

 Malinka, W.; Deren, A., Pol.J.Chem., CODEN: PJCHDQ, 66(12), <1992>, 1953-1960; BABS-5713285

Reference(s):

 Malinka, W.; Deren, A., Pol.J.Chem., CODEN: PJCHDQ, 66(12), <1992>, 1953-1960; BABS-5713285

Nuclear Magnetic Resonance:

NMR

Description: Chemical shifts

Nucleus: 1H Solvents: CDC13

Reference(s):

 Malinka, W.; Deren, A., Pol.J.Chem., CODEN: PJCHDQ, 66(12), <1992>, 1953-1960; BABS-5713285

NMR

Description: Spin-spin coupling constants

Solvents: CDCl3
Note(s): 1H-1H

Reference(s):

 Malinka, W.; Deren, A., Pol.J.Chem., CODEN: PJCHDQ, 66(12), <1992>, 1953-1960; BABS-5713285

L18 ANSWER 19 OF 24 BEILSTEIN COPYRIGHT 2002 BEILSTEIN CDS MDL

Melting Point:
Value | Ref.
(MP) |
(Cel) |

235 - 238 | 1, 2

Reference(s):

1. Sianesi, E. et al., J.Med.Chem., CODEN: JMCMAR, 16, <1973>, 1133-1137

2. Patent: Recordati S.A. DE 2022694 1970, Chem. Abstr., 74(141829)

FBRN 691238 FMF C14 H18 N2 O4 S

```
Melting Point:
 Value
           |Ref.
 (MP)
 (Cel)
           1
========+=====
 104 - 106 | 1, 2
```

Reference(s):

1. Patent: Recordati SA DE 2124953 1971, Chem. Abstr., 76(72535), <1972>

2. Patent: Recordati SA, Chem. Pharm. Co. US 3770733 1971, Chem. Abstr., 80 (48016)

Beilstein Records (BRN): 1224941 Beilstein Pref. RN (BPR): 35263-36-6 35263-36-6 CAS Reg. No. (RN):

Chemical Name (CN): 1-<(1,1-dioxo-3,4-dihydro-1H-1.lambda.6-

benzo<e><1,2>thiazin-2-yl)-acetyl>-4-

methyl-

piperazine

Autonom Name (AUN): 2-(1,1-dioxo-3,4-dihydro-1H-1.lambda.6benzo<e><1,2>thiazin-2-yl)-1-(4-methyl-

piperazin-1-yl)-ethanone

Molec. Formula (MF): C15 H21 N3 O3 S

Molecular Weight (MW): 323.41

Lawson Number (LN): 30877, 28000, 3379, 2817

Compound Type (CTYPE): heterocyclic Constitution ID (CONSID): 1186049 Tautomer ID (TAUTID): 1236575 Beilstein Citation (BSO): 5-27

Entry Date (DED): 1988/11/29 Update Date (DUPD): 1992/08/12

Reference(s):

1. Patent: Recordati SA DE 2124953 1971, Chem. Abstr., 76(72535), <1972>

2. Patent: Recordati SA, Chem. Pharm. Co. US 3770733 1971, Chem. Abstr., 80(48016)

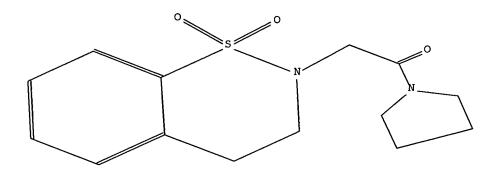
Reference(s):

Patent: Recordati SA DE 2124953 1971, Chem. Abstr., 76(72535), <1972>
 Patent: Recordati SA, Chem. Pharm. Co. US 3770733 1971, Chem. Abstr.,

80(48016)

Reference(s):

Patent: Recordati SA DE 2124953 1971, Chem.Abstr., 76(72535), <1972>
 Patent: Recordati SA, Chem.Pharm.Co. US 3770733 1971, Chem.Abstr., 80(48016)



L18 ANSWER 24 OF 24 BEILSTEIN COPYRIGHT 2002 BEILSTEIN CDS MDL

Further Information:

FINFO

Reference(s):

1. Patent: Recordati S.A. DE 2022694 1970, Chem.Abstr., 74(141829)

Beilstein Records (BRN): 691238

Chemical Name (CN): 2-(2-morpholin-4-yl-ethyl)-1,1-dioxo-1,4-

dihydro-2H-1.lambda.6-

benzo<e><1,2>thiazin-3-

one

Autonom Name (AUN): 2-(2-morpholin-4-yl-ethyl)-1,1-dioxo-1,4-

dihydro-2H-1.lambda.6-

benzo<e><1,2>thiazin-3-

one

Molec. Formula (MF): C14 H18 N2 O4 S

Molecular Weight (MW): 310.37

Lawson Number (LN): 31166, 30824, 3018

Compound Type (CTYPE): heterocyclic

Constitution ID (CONSID): 628350 Tautomer ID (TAUTID): 659824 Beilstein Citation (BSO): 5-27

Entry Date (DED): 1988/11/28 Update Date (DUPD): 1992/11/13

```
ANSWER 1 OF 9 MARPAT COPYRIGHT 2002 ACS
L22
     136:363846 MARPAT
AN
     Composition comprising serotonin receptor antagonists, 5 HT-2 and 5 HT-3
ΤI
IN
     Skogvall, Staffan
PA
     Respiratorius A.B., Swed.
SO
     PCT Int. Appl., 123 pp.
     CODEN: PIXXD2
DT
     Patent
LА
    English
FAN.CNT 1
                     KIND DATE
     PATENT NO.
                                        APPLICATION NO. DATE
     _____
                     ----
                                         ----- ----
PΙ
    WO 2002036114
                     A1
                           20020510
                                         WO 2001-SE2373 20011030
        W: AE, AG, AL, AM, AT, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH,
            CN, CO, CR, CU, CZ, CZ, DE, DE, DK, DK, DM, DZ, EC, EE, EE, ES,
            FI, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG,
            KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW,
            MX, MZ, NO, NZ, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SK, SL,
            TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY,
            KG, KZ, MD, RU
        RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY,
            DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF,
            BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG
PRAI SE 2000-3996
                     20001101
    US 2000-244662P 20001101
    A compn. comprising a combination of compds. comprising: (a) at least
AΒ
one
    compd. with antagonist activity to the 5-HT3 receptor; and (b) at least
    one compd. with antagonist activity to the 5-HT2 receptor is described.
    The invention relates to the use of said compn. as a medicament for
```

therapeutic or prophylactic treatment of disorders involving airway

constriction in humans or animals.

MSTR 3

MPL:

claim 2

```
L22
    ANSWER 2 OF 9 MARPAT COPYRIGHT 2002 ACS
AN
    136:85830 MARPAT
TI
     Preparation of bicyclic lactams and sulfonamides as 5-HT1A agonists
IN
    Steiner, Gerd; Schellhaas, Kurt; Szabo, Laszlo; Behl, Berthold;
    Garcia-Ladona, Francisco Javier; Unger, Liliane
PA
    Knoll Gmbh, Germany
SO
    PCT Int. Appl., 39 pp.
    CODEN: PIXXD2
DT
    Patent
LA
    German
FAN.CNT 1
                     KIND DATE
                                          APPLICATION NO. DATE
    PATENT NO.
                     ____
                                          _____
                           _____
                                         WO 2001-EP7571
PΙ
    WO 2002002529
                     A1
                           20020110
                                                           20010702
        W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN,
            CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH,
            GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR,
            LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT,
            RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US,
            UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM
        RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY,
            DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF,
            BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG
    DE 10031391
                      A1
                           20020207
                                        DE 2000-10031391 20000703
PRAI DE 2000-10031391 20000703
```

$$R^{1}$$
 (CH2) $n - X$ $Y - ZR2$

AB Title compds. [I; the ring including NA can be a 5-7 membered ring contg.

O, S, or double bond; A = CO, SO2; X = N; Y = CH2, CH2CH2, (CH2)3, CH2CH;

Z = N, C, CH; n = 2-4; R1 = H, halo, alkyl, CF3, OH, alkoxy, amino; R2 = (substituted) (anellated) Ph, pyridyl, pyrazinyl] and salts thereof, were

prepd. Thus, isoquinoline in DMF was stirred with NaH for 30 min. followed by addn. of 1-[4-(2-chloroethyl)-1-piperazinyl]isoquinoline (prepn. given) and stirring for 2 h at 80.degree. to give 82% 2-[2-(4-(1-isoquinolinyl)-1-piperazinyl)ethyl]-1(2H)-

isoquinoline.2HCl.2H2O. Tested I showed affinity for the 5-HTlA receptor $\,$

with Ki = 0.1-5.4 nM in HEK 293 cells.

MSTR 1

G1 = CH=CH G2 = 14-9 12-11

14 53

G4 = (2-4) CH2

G10 = SO2 MPL: claim 1

NTE: and physiologically acceptable salts

RE.CNT 16 THERE ARE 16 CITED REFERENCES AVAILABLE FOR THIS RECORD ALL CITATIONS AVAILABLE IN THE RE FORMAT

```
ANSWER 3 OF 9 MARPAT COPYRIGHT 2002 ACS
L22
     132:308329 MARPAT
AN
ΤI
     Preparation of tricyclic heterocycles as potassium channel openers
     Carroll, William A.; Agrios, Konstantinos A.; Basha, Fatima Z.; Chen,
IN
     Yiyuan; Kort, Michael E.; Kym, Philip R.; Tang, Rui; Turner, Sean C.;
Yi,
    Lin
PA
    Abbott Laboratories, USA
SO
    PCT Int. Appl., 181 pp.
    CODEN: PIXXD2
DT
     Patent
LΑ
    English
FAN.CNT 1
    PATENT NO.
                     KIND DATE
                                          APPLICATION NO. DATE
                     ____
                                          -----
PΙ
    WO 2000024741
                      A2
                           20000504
                                          WO 1999-US25536 19991028
                      A3
    WO 2000024741
                           20000713
        W: AE, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CR, CU,
            CZ, DE, DK, DM, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL,
            IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA,
            MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI,
            SK, SL, TJ, TM, TR, TT, TZ, UA, UG, UZ, VN, YU, ZA, ZW, AM, AZ,
            BY, KG, KZ, MD, RU, TJ, TM
         RW: GH, GM, KE, LS, MW, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE,
            DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF,
            CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG
                                         EP 1999-970991 19991028
                     A2 20010912
        R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,
            IE, SI, LT, LV, FI, RO
PRAI US 1998-181239
                     19981028
    US 1999-421912
                     19991020
    WO 1999-US25536 19991028
GΙ
```

$$R^4$$
 R^5
 R^1
 R^2
 R^3

AB Title compds. [I; R1 = aryl or heterocyclyl; R2R3 = D'A'(CHR)m; R = H or alkyl; R4R5 = DA(CH2)n; A = O, S, (un)substituted NH; A' = O, S, (un)substituted NH, CH2; D = CH2 or CO; D' = CH2, CO, SO, SO2; m, n = 1-3] were prepd. Thus, 3,4-BrFC6H3CHO was cyclocondensed with MeCOCH2CO2Et and NH3 and the brominated product treated with liq. NH3 to give I (R1 = C6H3BrF-3,4, R2R3,R4R5 = CONHCH2). Data for biol. activity of I were given.

MSTR 1

$$G3 = S02$$
 $G6 = 352$

$$G9 = 164$$

G10 = morpholino

DER: or pharmaceutically acceptable salts, amides, esters or prodrugs

MPL: claim 1

NTE: additional substitution and ring formation also claimed

NTE: substitution is restricted

L22 ANSWER 4 OF 9 MARPAT COPYRIGHT 2002 ACS

AN 130:196660 MARPAT

TI Benzothiazine derivatives.

IN Mizuno, Akira; Shibata, Makoto; Iwamori, Tomoe; Inomata, Norio

PA Suntory Limited, Japan

SO U.S., 60 pp., Cont.-in-part of U.S. Ser. No. 507,239. CODEN: USXXAM

DT Patent

LA English

FAN.CNT 3

FAN.	CNT 3			
	PATENT NO.	KIND DATE	APPLICATION NO. DATE	
PΙ	US 5874429	A 19990223	US 1996-669615 19960624	
	WO 9518117	A1 19950706	WO 1994-JP2194 19941222	
	W: AU, CA,	CN, JP, KR, US		
	RW: AT, BE,	CH, DE, DK, ES, FR,	GB, GR, IE, IT, LU, MC, NL, PT, SE	S
	JP 09012562	A2 19970114	JP 1995-177976 19950622	
	US 6001827	A 19991214	US 1998-192287 19981116	
	US 6316442	B1 20011113	US 1999-379853 19990824	
PRAI	JP 1993-345865	19931224		
	WO 1994-JP2194	19941222		
	JP 1995-177976	19950622		
	US 1995-507239	19950824		
	US 1996-669615	19960624		
	US 1998-192287	19981116		
GI				

$$\underbrace{8_{2}^{N}(CH_{2})_{3N}}_{N}\underbrace{N}\underbrace{N}_{F}\underbrace{N}_{I}\underbrace{CH_{2})_{3C1}}_{S_{2}^{N}(CH_{2})_{3C1}}$$

AB Benzothiazine derivs. such as I were prepd. as serotonin-2 and .alpha.1 blockers. Thus, 1 mmol of II, 1 mmol of 1-(2-fluorophenyl)piperazine hydrochloride, 4 mmol of NaHCO3, and 2 mmol of NaI were refluxed in 15 mL

of MeCN for 18 h to give a 50% yield of I. In tests of anti-serotonin activity in the superior mesenteric artery of guinea pigs, I at 10-7 and 10-6 M lowered contractions to 38.3 and 7.5%, resp., of control (contractions induced by 10-5 M serotonin).

MSTR 1

G1 = 16

G4 = 33

G12 = alkenylene (SO) G14 = 204-6 208-1

DER: or salts MPL: claim 1

NTE: substitution is restricted

NTE: also incorporates broader disclosure

STE: or isomers

RE.CNT 17 THERE ARE 17 CITED REFERENCES AVAILABLE FOR THIS RECORD ALL CITATIONS AVAILABLE IN THE RE FORMAT

L22 ANSWER 5 OF 9 MARPAT COPYRIGHT 2002 ACS

AN 126:144282 MARPAT

TI Preparation of thieno[3,2-e]-1,2-thiazine-6-sulfonamides useful as carbonic anhydrase inhibitors

IN Dean, Thomas R.; May, Jesse A.; Chen, Hwang-hsing

PA Alcon Laboratories, Inc., USA

SO U.S., 17 pp., Cont.-in-part of U.S. 5,378,703. CODEN: USXXAM

DT Patent

LA English

FAN.CNT 4

PAN.	CNT 4					
	PATENT NO.	KIND	DATE	APPLI	CATION NO.	DATE
ΡI	US 5585377	Α	19961217	US 19	94-362716	19941223
	US 5153192	Α	19921006	US 19	90-618765	19901127
	ZA 9102580	Α	19920129	ZA 19	91-2580	19910408
	US 5240923	Α	19930831	US 19	91-775313	19911009
	US 5378703	Α	19950103	US 19	93-19011	19930218
PRAI	US 1990-506730	19900	409			
	US 1990-618765	19901	.127			
	US 1991-775313	19911	.009			
	US 1993-19011	19930	218			
	US 1990-506780	19900	409			
GT.						

$$R^{3}$$
 $R^{1}R^{2}NSO2$
 $SO_{2}NH_{2}$
 $SO_{2}NH_{2}$
 $SO_{2}NH_{2}$
 $SO_{2}NH_{2}$
 $SO_{2}NH_{2}$
 $SO_{2}NH_{2}$
 $SO_{2}NH_{2}$
 $SO_{2}NH_{2}$

AB Thiophenesulfonamides [I; R1 and R3 are each satd. carbon atoms joined together to form an (un)substituted ring of 6 members; R2 = C1-8 alkyl substituted with COR7, C2-8 alkyl substituted with O2CR7, NHCOR7; R7 = C1-8 alkyl, (un)substituted C1-8 alkyl, C1-4 alkoxy, C2-4 alkoxy, (un)substituted NH2, Ph or R10; R10 = a monocyclic ring system selected from the group consisting of furan, thiophene, pyrrole, pyrazole, imidazole, triazole, tetrazole, oxazole, isoxazole, isothiazole, thiazole,

thiadiazole, pyridine, pyrimidine, pyridazine, and pyrazine] and pharmaceutical compns. contg. the compds. useful in controlling intraocular pressure are disclosed. Methods for controlling intraocular pressure through administration of the compns. are also disclosed.

These

compds. are useful as carbonic anhydrase inhibitors and also for treatment

of glaucoma (no data). Thus, (S)-N-(1,1-dimethylethyl)-3,4-dihydro-4-hydroxy-2H-thieno[3,2-e]-1,2-thiazine-6-sulfonamide 1,1-dioxide (prepn. given) was treated with NaH in DMF at 0.degree. for 20 min and alkylated by Et 4-bromobutyrate at room temp. for 6 h to give Et <math>(S)-6-[[(1,1-dimethylethyl)amino]sulfonyl]-3,4-dihydro-4-hydroxy-2H-thieno[3,2-e]-1,2-thiazine-2-butanoate hydrochloride. The latter compd. was tosylated by tosyl chloride in THF contq. Et3N and underwent

amination

with aq. ethylamine at room temp. overnight, followed by treatment with CF3CO2H at room temp. for 18 h to give the title compd. (II.HCl). Ophthalmic gel, soln., and suspension contg. II.HCl were formulated.

MSTR 1A

$$G5 = 42$$

$$G3$$
 42
 $G3$
 $G3$
 $G3$

$$G6 = alkyl < (1-8) > (SR 38)$$

38(0)-G5

DER: or pharmaceutically acceptable salts

MPL: claim 1

NTE: G3 groups may form oxo

STE: 207-S

MSTR 1B

G5 = 42

```
ANSWER 6 OF 9 MARPAT COPYRIGHT 2002 ACS
L22
AN
     124:146182 MARPAT
ΤI
     Preparation of benzothiazine derivatives for inhibiting dysuria
IN
    Masaki, Mitsuo; Miyake, Norihisa; Tendo, Atsushi; Ishida, Michiko;
     Shinozaki, Atsuhiko; Nomura, Yutaka; Goto, Yasunori
PA
    Nippon Chemiphar Co., Ltd., Japan
     PCT Int. Appl., 108 pp.
SO
     CODEN: PIXXD2
DT
     Patent
     Japanese
LA
FAN.CNT 1
     PATENT NO.
                     KIND DATE
                                          APPLICATION NO. DATE
                     ----
                      A1
                                          WO 1995-JP632
                                                            19950331
PΙ
    WO 9526959
                           19951012
        W: AM, AU, BB, BG, BR, BY, CA, CN, CZ, EE, FI, GE, HU, IS, KG, KR,
             KZ, LK, LR, LT, LV, MD, MG, MN, MX, NO, NZ, PL, RO, RU, SG, SI,
             SK, TJ, TT, UA, US, UZ, VN
         RW: KE, MW, SD, SZ, UG, AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT,
             LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE,
             SN, TD, TG
     JP 07278125
                      A2
                            19951024
                                           JP 1994-85831
                                                            19940331
    AU 9520849
                      A1
                            19951023
                                          AU 1995-20849
                                                            19950331
    JP 08003152
                      A2
                            19960109
                                           JP 1995-100505
                                                            19950331
    EP 753514
                      A1
                            19970115
                                          EP 1995-913402
                                                            19950331
         R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LI, LU, NL, PT, SE
                                         CN 1995-193184
    CN 1148853
                     Α
                           19970430
                                                            19950331
    US 5773437
                            19980630
                                          US 1996-722112
                                                            19960930
                      Α
                                          AU 1998-97203
    AU 9897203
                            19990304
                                                            19981218
                      A1
PRAI JP 1994-85831
                     19940331
    JP 1994-103345
                     19940418
    AU 1995-20849
                     19950331
    WO 1995-JP632
                     19950331
GΙ
```

$$(R^{1})_{k} \xrightarrow{(CH_{2})_{w}} \xrightarrow{\overset{[O]_{p}}{\overset{[CH_{2})_{x}}{\overset{[CH_{2})_{x}}{\overset{[CH_{2})_{m}}{\overset{[CH_{2})_{n}}{\overset{[$$

AB The title compds. I [R1 represents hydrogen, alkyl, halogen, haloalkyl, hydroxy, alkoxy, nitro, amino, cyano, etc.; R2 represents hydrogen, alkyl, aryl, etc.; R3 and R4 represent each alkyl, etc., or R3 and R4 are combined together to form an optionally substituted heterocyclic group; k represents an integer of 1 to 4; m and n represent each an integer of 0 to 4; p+q = 0 to 4, wherein p is 0, 1 or 2 and q is 0 or 1; and w, x, y and represent each an integer of 0 to 2, and w+x+y+z = 1 or 2, provided when R1 to R4 represent each a specifically limited group, w+x+y+z may be 0]

are prepd. 2-[3-(4-Phenoxypiperidino)propyl]-2H-1,2-benzothiazin-4(3H)-one 1,1-dioxide hydrochloride (II) was prepd. in several steps starting from <math>2H-1,2-benzothiazin-4(3H)-one 1,1-dioxide ethylene ketal. II at 1 mg/kg i. v. inhibited urinary bladder contractions in rats.

MSTR 1

G9 = alkylene<EC (1-5) C, DC (0) M3> (SO (-1) G10)

G13 = morpholino MPL: claim 1

NTE: substitution is restricted

```
L22 ANSWER 7 OF 9 MARPAT COPYRIGHT 2002 ACS
```

123:340165 MARPAT AN

ΤI Preparation of benzothiazine derivatives as serotonin 2 antagonists and .alpha.1 blockers

IN Mizuno, Akira; Shibata, Makoto; Iwamori, Tomoe; Inomata, Norio

Suntory Ltd., Japan PA

PCT Int. Appl., 109 pp. so

CODEN: PIXXD2

DT Patent

Japanese LΑ

FAN.	CNT	3																
	PA'	TENT	NO.		KI	4D	DATE			AP	PLI	CATI	N NC	o. 	DATE			
ΡI	WO	9518	117		A.	L	1995	0706		WO	19	94-J	P219	4	1994	1222		
		W:	ΑU,	CA,	CN,	JP,	KR,	US										
		RW:	ΑT,	BE,	CH,	DE,	DK,	ES,	FR,	GB,	GR,	ΙE,	IT,	LU,	MC,	NL,	PT,	SE
	CA	2156	849		A.	Ą	1995	0706		CA	19	94-2	1568	49	1994	1222		
	AU	9513	710		A.	L	1995	0717		AU	19	95-13	3710		1994	1222		
	AU	6906	22		B2	2	1998	0430										
	ΕP	6866	32		A.	L	1995	1213		EP	19	95-9	0394	1	1994	1222		
		R:	AT,	BE,	CH,	DE,	DK,	ES,	FR,	GB,	GR,	ΙE,	IT,	LI,	LU,	MC,	NL,	PT,
SE																		
	CN	1119	859		Α		1996	0403		CN	19	94-19	91572	2	1994	1222		
	CN	1058	492		В		2000	1115										
	US	5874	429		Α		1999	0223		US	19	96-6	5961	5	1996	0624		
	US	6001	827		Α		1999	1214		US	19	98-19	9228	7	1998	1116		
	US	6316	442		B1	L	2001	1113		US	19	99-3	7985	3	1999	0824		
	CN	1281	854		Α		2001	0131		CN	20	00-1	03863	3	2000	0310		
PRAI	JP	1993	-345	865	199	312	224											
	WO	1994	-JP2	194	199	9412	222											
	JP	1995	-1779	976	199	9506	522											
	US	1995	-5072	239	199	9508	324											
	US	1996	-669	615	199	9606	524											
	US	1998	-1922	287	199	811	116											
GI																		

AΒ The title compds. I [broken line indicates the presence or absence of a ソ

bond; Z represents C(OR1):, etc.; R1 represents alkyl, aralkyl, etc.; A
 represents alkylene, alkenylene, etc.; Y represents CH, C: or N,
provided

when Y is CH, then m represents 0 or 1, n represents 1 or 2, and B represents O, S, carbonyl, etc., when Y is C: , then m represents 1, n represents 1 or 2, and B represents :CR6 (wherein the double bond is bound

to Y, and R6 represents optionally substituted aryl, etc.), and when Y is

N, then m represents 0 or 1, n represents 2 of 3, and B represents carbonyl, etc.; E1 and E2 represent each H or lower alkyl; and D represents an arom. hydrocarbon group, arom. heterocyclic group, etc.]

are prepd. The title compd. II (prepn. given) at 10-7 M in vitro gave 61.7

inhibition of serotonin-induced contraction of isolated guinea pig artery.

MSTR 1

$$\begin{array}{c|c}
G_{3}^{1} & -4G_{1} & 5 - G_{1} & 6 & 5G_{2} & 7 \\
G_{3}^{1} & -4G_{2} & 5 - G_{1} & 6 & -G_{2} & 7
\end{array}$$

$$G1 = 12-1 \ 13-3$$

G15 = alkenylene (SO)
G21 =
$$45-42 47-63$$

$$45\sqrt{\frac{G17}{47}}$$

DER: or salts MPL: claim 1

AN 123:83377 MARPAT

TI Sulfonamides useful as carbonic anhydrase inhibitors

IN Dean, Thomas R.; Chen, Hwang-Hsing; May, Jesse A.

PA Alcon Laboratories, Inc., USA

SO U.S., 25 pp. Cont.-in-part of U.S. 5,240,923.

CODEN: USXXAM

DT Patent

LA English

FAN.CNT 4

T.T.	CNI				
	PATENT NO.	KIND	DATE	APPLICATION NO. DAT	'E
PI	US 5378703	Α	19950103	US 1993-19011 199	30218
	US 5153192	Α	19921006	US 1990-618765 199	01127
	US 5240923	Α	19930831	US 1991-775313 199	911009
	US 5679670	Α	19971021	US 1994-357623 199	941215
	US 5585377	Α	19961217	US 1994-362716 199	941223
PRAI	US 1990-506780	19900	409		
	US 1990-618765	19901	127		
	US 1991-775313	19911	.009		
	US 1990-506730	19900	409		
	US 1993-19011	19930	218		
GI					

$$R^1$$
 $N = G$ $SO2NH2$ $SO2NH2$

AB Sulfonamides I [R1 and R3 are each satd. carbon atoms joined together to form a ring of 6 members in which said carbon atoms can be unsubstituted or substituted optionally with R4; R2 is e.g., H; C1-8 alkyl; C2-8 alkyl substituted with OH; R4 is e.g., OH; C1-4 alkyl unsubstituted or substituted optionally with OH] and pharmaceutical compns. contg. the compds. useful in controlling intraocular pressure (no data) are disclosed. Methods for controlling intraocular pressure through administration of the compns. are also disclosed. Ophthalmic

formulations

were given.

MSTR 2

$$G1 = 6$$

$$\underset{6}{\overset{G12}{\underset{8}{\overset{G12}{\underset{11}{\overset{G}{\underset{11}{\overset{G}{\underset{11}}{\overset{G}}{\overset{G}}{\overset{G}}{\overset{G}}{\overset{G}}{\overset{G}}}{\overset{G}}{\overset{G}}{\overset{G}}{\overset{G}}{\overset{G}}{\overset{G}}{\overset{G}}{\overset{G}}{\overset{G}}{\overset{G}}{\overset{G}}{\overset{G}}}{\overset{G}}{\overset{G}}{\overset{G}}{\overset{G}}{\overset{G}}{\overset{G}}}{\overset{G}}{\overset{G}}{\overset{G}}{\overset{G}}}{\overset{G}}{\overset{G}}}}{\overset{G}}}{\overset{G}}{\overset{G}}{\overset{G}}{\overset{G}}}{\overset{G}}{\overset{G}}}{\overset{G}}{\overset{G}}}{\overset{G}}{\overset{G}}}}{\overset{G}}}{\overset{G}}{\overset{G}}}{\overset{G}}{\overset{G}}}{\overset{G}}{\overset{G}}}{\overset{G}}}}{\overset{G}}}{\overset{G}}}{\overset{G}}{\overset{G}}}{\overset{G}}}{\overset{G}}{\overset{G}}{\overset{G}}}{\overset{G}}}}}{\overset{G}}{\overset{G}}}{\overset{G}}{\overset{G}}}{\overset{G}}}}{\overset{G}}}{\overset{G}}}{\overset{G}}}{\overset{G}}}{\overset{G}}}}{\overset{G}}}{\overset{G}}}{\overset{G}}}{\overset{G}}}{\overset{G}}}{\overset{G}}}}{\overset{G}}}{\overset{G}}}{\overset{G}}{\overset{G}}}{\overset{G}}}{\overset{G}}}}{\overset{G}}}{\overset{G}}}{\overset{G}}}{\overset{G}}}{\overset{G}}}{\overset{G}}}{\overset{G}}}{\overset{G}}}{\overset{G}}}{\overset{G}}}{\overset{G}}}{\overset{G}}}{\overset{G}}}{\overset{G}}}{\overset{G}}{\overset{G}}}{\overset{G}}}{\overset{G}}}{\overset{G}}}{\overset{G}}}{\overset{G}}}{\overset{G}}}{\overset{G}}}{\overset{G}}}{\overset{G}}}{\overset{G}}}{\overset{G}}}{\overset{G}}}{\overset{G}}}{\overset{G}}}{\overset{G}}}{\overset{G}}}{\overset{G}}}$$

$$G2 = 284$$

$$H_{\frac{2}{2}}g_{\frac{4}{4}}G_{31}$$

$$G12 = S02$$

$$G19 = (0-2) 180$$

ਸੂ§ਹ—G20

G31 = morpholino

DER: or pharmaceutically acceptable salts

MPL: disclosure

NTE: substitution is restricted

L22 ANSWER 9 OF 9 MARPAT COPYRIGHT 2002 ACS

AN 119:72498 MARPAT

TI Preparation of 1-alkyl-4-(arylmethyl)piperidines and their pharmaceutical

formulations as inhibitors of 5-HT reuptake

PA Rhone-Poulenc Rorer SA, Fr.

SO Fr. Demande, 43 pp.

CODEN: FRXXBL

DT Patent

LA French

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI GI	FR 2675801	A1	19921030	FR 1991-5048	19910424

Title piperidines I [R1 = OH, (un) substituted Ph, heterocyclyl, R4SO2NR5 (R4 = Ph, quinolyl, R5 = H, alkyl), or N(CO2R8)NHCO2R8 (R8 = alkyl); R2 = CH2, CH2CH2, NH, N-alkylimino; R3 = H, halo; R4 = Ph, quinolyl; n = 1-3; partial bond represents single or double C-C bond, where for R2 = NH, it is a double bond, and for R2 = CH2CH2, it a single bond] are prepd. by condensation of an appropriate alkyl halide R1(CH2)nX with 4-(arylmethyl)piperidine. The prepn. of racemates and enantiomers of compds. I contg. at least one chiral center, and their salts with mineral or org. acids, are claimed. Formulations of I for medical use are given (3 examples). The compds. exhibit inhibitory activity of 5-HT recapture.

MSTR 1

G1 = 144

G6 = SO2

G8 = CMe2

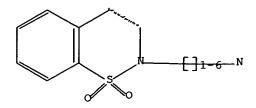
G10 = (1-3) CH2

DER: or (in)organic acid salts

MPL: claim 1

STE: and enantiomers

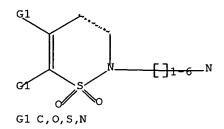
=> d l1; d l11; d his; log y L1 HAS NO ANSWERS L1 STR



Structure attributes must be viewed using STN Express query preparation.

L11 HAS NO ANSWERS

L11 STR



Structure attributes must be viewed using STN Express query preparation.

(FILE 'HOME' ENTERED AT 17:14:12 ON 08 AUG 2002)

FILE 'REGISTRY' ENTERED AT 17:14:19 ON 08 AUG 2002

L1 STRUCTURE UPLOADED

L2 2 S L1

L3 62 S L1 FUL

FILE 'CAPLUS' ENTERED AT 17:14:55 ON 08 AUG 2002

L4 12 S L3

FILE 'BEILSTEIN' ENTERED AT 17:15:35 ON 08 AUG 2002

L5 0 S L1

L6 6 S L1 FUL

L7 1 S L6 NOT L3

FILE 'MARPAT' ENTERED AT 17:16:29 ON 08 AUG 2002

L8 2 S L1

L9 19 S L1 FUL

L10 14 S L9 NOT L4

FILE 'STNGUIDE' ENTERED AT 17:18:58 ON 08 AUG 2002

FILE 'REGISTRY' ENTERED AT 17:19:57 ON 08 AUG 2002

L11 STRUCTURE UPLOADED

L12 3 S L11

L13 105 S L11 FUL

L14 43 S L13 NOT L3

FILE 'CAPLUS' ENTERED AT 17:20:42 ON 08 AUG 2002

12 S L14 L15 FILE 'BEILSTEIN' ENTERED AT 17:21:22 ON 08 AUG 2002 L16 L17 24 S L11 FUL L18 24 S L17 NOT L14 FILE 'MARPAT' ENTERED AT 17:22:56 ON 08 AUG 2002 L19 3 S L11 L20 25 S L11 FUL 22 S L20 NOT L15 L21 L22 9 S L21 NOT L10

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·	ENTRY	SESSION
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